HIGHLIGHTS

REVISION NO. 33 Jun 01/10

Pages which have been revised are outlined below, together with the Highlights of the Revision

CH/SE/SU C PAGES	REASON FOR CHANGE	EFFECTIVITY
CHAPTER 52		
L.E.P. 1-10	Revised to Reflect this revision indicating new,revised, and/or deleted pages	
T. OF C. 1, 16-17	Revised to reflect this revision	
52-10-00 301- 305	Layout Improved or Effectivity Updated	
52-10-14 301, 303- 305	Layout improved **TEXT AMENDED TO CLARIFY INSTALLATIONPOSITION OF THE RELEASE LEVER.**	
52-10-30 401, 414, 421	Layout Improved or Effectivity Updated	
52-10-30 501, 512	Layout Improved or Effectivity Updated	
52-11-11 401, 405	Minor additions and amplification **R03: GSE P/N UPDATE**	
52-11-21 401- 402	Minor additions and amplification **R04: GSE P/N UPDATE**	
52-41-14 401- 407	Minor additions and amplification **ADDED WARNING FOR DISCONNECTION OF CRANK**	
52-73-00 518- 522	Layout Improved or Effectivity Updated	

Printed in France

CHAPTER 52

DOORS

LIST OF EFFECTIVE PAGES

N, R or D indicates pages which are New, Revised or Deleted respectively
Remove and insert the affected pages and complete the Record of Revisions and the Record of Temporary Revisions as necessary

CH/SE/SU	C	PAGE	DATE
RECORD			
OF TEMP.			
REVISION			
L.E.P.	R	1-10	Jun01/10
T. of C.	R	1	Jun01/10
T. of C.		2	Jun01/07
T. of C.		3	Jun01/07
T. of C.		4	Jun01/07
T. of C.		5	Jun01/07
T. of C.		6	Jun01/07
T. of C.		7	Jun01/07
T. of C.		8	Jun01/07
T. of C.		9	Jun01/07
T. of C.		10	Jun01/08
T. of C.		11	Jun01/07
T. of C.		12	Jun01/07
T. of C.		13	Jun01/08
T. of C.		14	Jun01/08
T. of C.		15	Jun01/08
T. of C.	R	16	Jun01/10
T. of C.	R	17	Jun01/10
52-00-00		1	Dec01/90
52-00-00		2	Dec01/90
52-00-00		3	Dec01/92
52-00-00		4	Dec01/90
52-00-00		5	Dec01/98
52-00-00		6	Dec01/92
52-00-00		7	Dec01/92
52-00-00		8	Dec01/98
52-00-00		9	Jun01/92
52-00-00		301	Jun01/08
52-00-00		601	Dec01/90
52-00-00		602	Dec01/90
52-10-00		1	Dec01/98
52-10-00		2	Dec01/90
52-10-00		3	Dec01/90
52-10-00		4	Dec01/98
52-10-00		5	Dec01/90
52-10-00		6	Jun01/05
52-10-00		7	Jun01/05
52-10-00		8	Jun01/05
52-10-00		9	Jun01/05
52-10-00		10	Jun01/05
52-10-00		11	Dec01/90
52-10-00		12	Dec01/90
52-10-00		13	Dec01/90
52-10-00		14	Dec01/90
52-10-00		15	Dec01/90
52-10-00		16	Dec01/90
52-10-00		17	Dec01/90
52-10-00		18	Dec01/90
52-10-00		19	Dec01/90
52-10-00		20	Dec01/90
52-10-00		21	Dec01/90
52-10-00		22	Dec01/90
52-10-00		23	Dec01/90
52-10-00		24	Dec01/90
52-10-00		25	Dec01/90
52-10-00		26	Dec01/90
52-10-00		27	Dec01/90
52-10-00		28	Dec01/90
52-10-00		29	Dec01/90
52-10-00		30	Dec01/90
52-10-00		31	Dec01/90
52-10-00		32	Dec01/90
52-10-00		33	Dec01/90
52-10-00		34	Dec01/98
52-10-00		35	Dec01/90
52-10-00		36	Dec01/98
52-10-00		37	Dec01/98
52-10-00		38	Jun01/92
52-10-00		39	Jun01/92
52-10-00		201	Jun01/01
52-10-00		202	Jun01/01
52-10-00	R	301	Jun01/10
52-10-00	R	302	Jun01/10
52-10-00	R	303	Jun01/10
52-10-00	R	304	Jun01/10
52-10-00	N	305	Jun01/10
52-10-00		501	Jun01/07
52-10-00		502	Dec01/90
52-10-00		503	Dec01/90
52-10-00		504	Dec01/90
52-10-00		505	Dec01/90
52-10-00		506	Dec01/90
52-10-00		701	Dec01/90
52-10-00		702	Dec01/90
52-10-00		703	Dec01/90
52-10-00		901	Jun01/97
52-10-00		902	Dec01/99
52-10-11		501	Jun01/99
52-10-11		502	Jun01/99
52-10-11		503	Dec01/90
52-10-11		504	Jun01/03
52-10-11		505	Dec01/90
52-10-11		506	Jun01/04
52-10-11		507	Jun01/04
52-10-11		508	Jun01/04
52-10-11		509	Jun01/04
52-10-11		510	Jun01/04
52-10-11		511	Jun01/04
52-10-11		512	Jun01/04
52-10-11		513	Jun01/04
52-10-11		514	Jun01/04
52-10-11		515	Jun01/04
52-10-11		516	Jun01/09
52-10-11		517	Jun01/04
52-10-11		518	Jun01/09
52-10-11		519	Jun01/04
52-10-11		520	Jun01/04
52-10-11		521	Jun01/04
52-10-11		522	Jun01/04
52-10-11		523	Jun01/04
52-10-11		524	Jun01/04
52-10-11		525	Jun01/04
52-10-11		526	Jun01/04
52-10-11		527	Jun01/04
52-10-11		528	Jun01/04
52-10-11		529	Jun01/04
52-10-11		530	Jun01/04
52-10-11		531	Jun01/07
52-10-11		532	Jun01/07
52-10-11		533	Jun01/07

CH/SE/SU	C	PAGE	DATE
52-10-11		601	Jun01/95
52-10-11		602	Jun01/94
52-10-11		603	Jun01/00
52-10-11		604	Jun01/00
52-10-11		605	Jun01/04
52-10-11		606	Jun01/00
52-10-11		607	Jun01/00
52-10-11		608	Jun01/00
52-10-11		609	Jun01/04
52-10-11		610	Jun01/00
52-10-11		611	Jun01/00
52-10-11		612	Jun01/00
52-10-11		613	Jun01/00
52-10-11		614	Jun01/00
52-10-11		615	Jun01/00
52-10-11		616	Jun01/00
52-10-11		617	Jun01/00
52-10-11		618	Jun01/00
52-10-11		619	Jun01/00
52-10-11		620	Jun01/00
52-10-11		621	Jun01/00
52-10-11		622	Jun01/00
52-10-11		623	Jun01/00
52-10-11		624	Jun01/00
52-10-11		625	Jun01/00
52-10-11		626	Jun01/00
52-10-11		627	Jun01/00
52-10-11		628	Jun01/00
52-10-11		629	Jun01/00
52-10-11		630	Jun01/00
52-10-11		631	Jun01/00
52-10-11		632	Jun01/00
52-10-11		633	Jun01/00
52-10-11		634	Jun01/00
52-10-11		635	Jun01/00
52-10-11		636	Jun01/00
52-10-11		637	Jun01/00
52-10-11		638	Jun01/00
52-10-11		639	Jun01/00
52-10-11		640	Jun01/00
52-10-12		501	Dec01/95
52-10-12		502	Jun01/94
52-10-12		503	Dec01/90
52-10-12		504	Dec01/90
52-10-12		505	Dec01/90
52-10-12		506	Dec01/90
52-10-12		507	Jun01/94
52-10-12		508	Jun01/94
52-10-12		509	Jun01/94
52-10-12		510	Jun01/94
52-10-12		511	Jun01/94
52-10-12		512	Jun01/94
52-10-12		513	Jun01/94
52-10-12		601	Dec01/92
52-10-12		602	Dec01/99
52-10-12		603	Dec01/99
52-10-12		604	Dec01/99
52-10-13		401	Dec01/98
52-10-13		402	Dec01/98
52-10-13		403	Jun01/92
52-10-13		404	Jun01/92
52-10-13		405	Jun01/92
52-10-13		406	Jun01/92
52-10-13		407	Dec01/98
52-10-13		408	Dec01/98
52-10-13		409	Dec01/98
52-10-13		410	Dec01/98
52-10-13		601	Jun01/94
52-10-13		602	Jun01/94
52-10-14	R	301	Jun01/10
52-10-14		302	Dec01/90
52-10-14	R	303	Jun01/10
52-10-14	R	304	Jun01/10
52-10-14	N	305	Jun01/10
52-10-14		401	Jun01/98
52-10-14		402	Dec01/98
52-10-14		403	Dec01/90
52-10-14		404	Jun01/98
52-10-14		405	Dec01/98
52-10-14		501	Jun01/98
52-10-14		502	Jun01/98
52-10-14		503	Jun01/99
52-10-14		504	Jun01/98
52-10-14		505	Jun01/99
52-10-14		506	Jun01/98
52-10-14		507	Jun01/99
52-10-14		508	Jun01/98
52-10-14		509	Jun01/98
52-10-14		510	Jun01/99
52-10-14		601	Jun01/98
52-10-14		602	Jun01/98
52-10-14		603	Dec01/98
52-10-14		604	Jun01/99
52-10-14		605	Jun01/99
52-10-14		606	Jun01/99
52-10-14		607	Jun01/99
52-10-18		401	Jun01/06
52-10-18		402	Jun01/06
52-10-18		403	Jun01/06
52-10-18		404	Jun01/06
52-10-18		801	Dec01/90
52-10-18		802	Dec01/94
52-10-18		803	Dec01/90
52-10-18		804	Dec01/94
52-10-18		805	Dec01/94
52-10-18		806	Dec01/94
52-10-18		807	Dec01/94
52-10-20		501	Jun01/00
52-10-20		502	Jun01/00
52-10-20		503	Jun01/00
52-10-20		504	Jun01/00
52-10-20		505	Jun01/02
52-10-20		506	Jun01/00
52-10-20		507	Jun01/02
52-10-20		508	Jun01/02
52-10-20		509	Jun01/02
52-10-20		510	Jun01/02
52-10-20		511	Jun01/02
52-10-20		512	Jun01/02
52-10-20		513	Jun01/02
52-10-20		514	Jun01/02
52-10-20		515	Jun01/02
52-10-20		516	Jun01/02
52-10-20		517	Jun01/02
52-10-20		518	Jun01/02
52-10-20		519	Jun01/02
52-10-20		520	Jun01/02
52-10-20		521	Jun01/02
52-10-20		601	Jun01/00
52-10-20		602	Jun01/02
52-10-20		603	Jun01/91
52-10-20		604	Jun01/02
52-10-20		605	Dec01/90
52-10-20		606	Dec01/90
52-10-20		607	Dec01/98
52-10-20		608	Jun01/02
52-10-20		609	Dec01/90
52-10-20		610	Dec01/90
52-10-20		611	Dec01/90
52-10-20		612	Dec01/90
52-10-20		613	Jun01/00
52-10-20		614	Dec01/90
52-10-20		615	Dec01/90
52-10-20		616	Jun01/02
52-10-20		617	Dec01/90
52-10-20		618	Dec01/90
52-10-20		619	Dec01/90
52-10-20		620	Dec01/90
52-10-20		621	Dec01/90
52-10-20		622	Dec01/90
52-10-20		623	Dec01/90
52-10-20		624	Dec01/90
52-10-20		625	Dec01/90

CH/SE/SU	C	PAGE	DATE
52-10-20		626	Dec01/90
52-10-20		627	Dec01/90
52-10-20		628	Jun01/93
52-10-20		629	Dec01/90
52-10-20		630	Dec01/90
52-10-20		631	Dec01/90
52-10-20		632	Dec01/90
52-10-20		633	Dec01/90
52-10-20		634	Dec01/90
52-10-20		635	Dec01/90
52-10-20		636	Dec01/90
52-10-20		637	Dec01/90
52-10-20		638	Dec01/90
52-10-20		639	Dec01/90
52-10-20		640	Dec01/90
52-10-20		641	Dec01/90
52-10-20		642	Dec01/90
52-10-20		643	Dec01/90
52-10-20		644	Dec01/90
52-10-20		645	Dec01/90
52-10-20		646	Dec01/90
52-10-20		647	Dec01/90
52-10-20		648	Dec01/90
52-10-20		649	Dec01/90
52-10-20		650	Dec01/90
52-10-30	R	401	Jun01/10
52-10-30		402	Dec01/90
52-10-30		403	Dec01/90
52-10-30		404	Dec01/90
52-10-30		405	Dec01/90
52-10-30		406	Dec01/90
52-10-30		407	Dec01/90
52-10-30		408	Dec01/90
52-10-30		409	Dec01/90
52-10-30		410	Jun01/04
52-10-30		411	Dec01/90
52-10-30		412	Dec01/90
52-10-30		413	Dec01/90
52-10-30	R	414	Jun01/10
52-10-30		415	Dec01/90
52-10-30		416	Dec01/90
52-10-30		417	Dec01/92
52-10-30		418	Jun01/04
52-10-30		419	Dec01/90
52-10-30		420	Dec01/90
52-10-30	R	421	Jun01/10
52-10-30	R	501	Jun01/10
52-10-30		502	Jun01/04
52-10-30		503	Jun01/04
52-10-30		504	Jun01/03
52-10-30		505	Jun01/03
52-10-30		506	Jun01/04
52-10-30		507	Jun01/03
52-10-30		508	Jun01/03
52-10-30		509	Jun01/03
52-10-30		510	Jun01/03
52-10-30		511	Jun01/04
52-10-30	R	512	Jun01/10
52-10-30		513	Jun01/03
52-10-30		601	Jun01/95
52-10-30		602	Jun01/94
52-10-30		603	Dec01/94
52-10-30		604	Jun01/01
52-10-30		605	Jun01/94
52-10-30		606	Jun01/95
52-10-30		607	Jun01/94
52-10-30		608	Jun01/94
52-10-30		609	Jun01/94
52-10-30		610	Jun01/94
52-10-30		611	Jun01/94
52-10-30		612	Jun01/94
52-10-30		613	Jun01/94
52-10-30		614	Jun01/94
52-10-30		615	Jun01/94
52-10-30		616	Jun01/94
52-10-30		617	Jun01/94
52-10-30		618	Jun01/94
52-10-30		619	Jun01/94
52-10-30		620	Jun01/94
52-10-30		621	Jun01/94
52-10-30		622	Jun01/94
52-10-30		623	Jun01/94
52-10-30		624	Jun01/94
52-10-30		625	Jun01/94
52-10-30		626	Jun01/94
52-10-30		627	Jun01/94
52-10-30		628	Jun01/94
52-10-30		629	Jun01/94
52-10-30		630	Jun01/94
52-10-30		631	Jun01/94
52-10-30		632	Jun01/94
52-10-30		633	Jun01/94
52-10-30		634	Jun01/94
52-10-30		635	Jun01/94
52-10-30		636	Jun01/94
52-10-30		637	Jun01/94
52-10-30		638	Jun01/94
52-10-31		401	Dec01/90
52-10-31		402	Dec01/90
52-10-31		403	Dec01/90
52-10-31		404	Dec01/90
52-10-31		405	Dec01/90
52-10-31		406	Dec01/90
52-10-31		407	Dec01/90
52-10-31		408	Dec01/90
52-10-31		409	Dec01/90
52-10-31		410	Dec01/90
52-10-31		411	Dec01/90
52-10-31		412	Dec01/90
52-10-31		413	Dec01/90
52-10-31		414	Dec01/90
52-10-31		415	Dec01/90
52-10-31		416	Dec01/90
52-10-31		417	Dec01/90
52-11-11	R	401	Jun01/10
52-11-11		402	Jun01/04
52-11-11		403	Jun01/04
52-11-11		404	Jun01/04
52-11-11	R	405	Jun01/10
52-11-11		406	Jun01/04
52-11-11		407	Jun01/04
52-11-12		401	Jun01/04
52-11-12		402	Jun01/04
52-11-12		403	Jun01/04
52-11-12		404	Dec01/90
52-11-12		405	Jun01/04
52-11-12		406	Jun01/04
52-11-12		407	Jun01/04
52-11-12		408	Jun01/04
52-11-12		409	Jun01/04
52-11-12		410	Jun01/04
52-11-12		411	Jun01/04
52-11-12		412	Jun01/04
52-11-12		413	Jun01/04
52-11-12		414	Jun01/04
52-11-21	R	401	Jun01/10
52-11-21	R	402	Jun01/10
52-11-21		403	Jun01/04
52-11-21		404	Jun01/04
52-11-21		405	Jun01/04
52-11-21		406	Jun01/04
52-11-21		407	Jun01/04
52-11-21		408	Jun01/04
52-11-21		409	Dec01/90
52-11-21		410	Jun01/04
52-11-21		411	Jun01/04
52-11-21		412	Jun01/04
52-11-21		413	Jun01/04
52-11-21		414	Jun01/04
52-11-21		415	Jun01/04
52-11-21		416	Jun01/04
52-11-21		417	Jun01/04

CH/SE/SU	C	PAGE	DATE
52-11-21		418	Jun01/04
52-11-21		419	Jun01/04
52-11-21		420	Jun01/04
52-11-21		421	Jun01/04
52-11-21		422	Jun01/04
52-11-21		423	Jun01/04
52-11-21		424	Jun01/04
52-13-11		401	Jun01/94
52-13-11		402	Jun01/94
52-13-11		403	Dec01/98
52-13-11		404	Jun01/94
52-13-11		405	Dec01/98
52-13-11		406	Dec01/98
52-13-11		407	Dec01/98
52-13-11		408	Dec01/98
52-13-11		409	Dec01/98
52-13-11		410	Dec01/98
52-13-11		411	Dec01/98
52-13-11		412	Dec01/98
52-13-12		401	Jun01/04
52-13-12		402	Jun01/04
52-13-12		403	Jun01/04
52-13-12		404	Jun01/04
52-13-12		405	Jun01/04
52-13-12		406	Jun01/04
52-13-12		407	Jun01/04
52-13-12		408	Jun01/04
52-13-12		409	Jun01/04
52-13-12		410	Jun01/04
52-13-12		411	Jun01/04
52-13-12		412	Jun01/04
52-13-21		401	Dec01/90
52-13-21		402	Jun01/94
52-13-21		403	Jun01/94
52-13-21		404	Dec01/90
52-13-21		405	Jun01/94
52-13-21		406	Dec01/90
52-13-21		407	Dec01/90
52-13-21		408	Dec01/90
52-13-21		409	Jun01/94
52-13-21		410	Dec01/90
52-13-21		411	Dec01/90
52-13-21		412	Dec01/90
52-13-21		413	Dec01/90
52-13-21		414	Dec01/90
52-13-21		415	Dec01/90
52-13-21		416	Dec01/90
52-13-21		417	Dec01/90
52-13-21		418	Dec01/90
52-13-21		419	Dec01/90
52-13-21		420	Dec01/90
52-13-21		421	Dec01/90
52-13-21		422	Dec01/90
52-13-21		423	Dec01/90
52-13-21		424	Dec01/94
52-13-21		425	Dec01/94
52-13-21		426	Jun01/94
52-13-21		427	Jun01/94
52-13-21		428	Jun01/94
52-13-21		429	Jun01/94
52-13-21		430	Dec01/94
52-13-21		431	Dec01/94
52-13-21		432	Jun01/94
52-23-00		1	Dec01/94
52-23-00		2	Dec01/94
52-23-00		3	Dec01/90
52-23-00		4	Dec01/90
52-23-00		5	Dec01/90
52-23-00		6	Dec01/90
52-23-00		7	Dec01/90
52-23-00		8	Dec01/90
52-23-00		9	Dec01/90
52-23-00		10	Dec01/90
52-23-00		11	Dec01/90
52-23-00		12	Dec01/94
52-23-00		301	Jun01/08
52-23-00		302	Dec01/90
52-23-00		303	Jun01/08
52-23-00		601	Jun01/07
52-23-00		602	Jun01/07
52-23-00		603	Jun01/07
52-23-00		604	Jun01/07
52-23-00		701	Dec01/90
52-23-00		702	Dec01/90
52-23-00		703	Dec01/90
52-23-11		401	Dec01/90
52-23-11		402	Dec01/90
52-23-11		403	Dec01/90
52-23-11		404	Dec01/90
52-23-11		405	Dec01/90
52-23-11		406	Dec01/90
52-23-11		407	Dec01/90
52-23-11		501	Dec01/90
52-23-11		502	Dec01/90
52-23-11		503	Dec01/92
52-23-11		504	Jun01/94
52-23-11		505	Jun01/94
52-23-11		506	Jun01/94
52-23-11		507	Jun01/94
52-23-11		508	Dec01/90
52-23-11		509	Dec01/90
52-23-11		510	Dec01/90
52-23-11		511	Dec01/90
52-23-11		512	Dec01/90
52-23-11		513	Dec01/90
52-23-11		514	Dec01/90
52-23-11		515	Dec01/90
52-23-11		516	Dec01/90
52-23-11		517	Dec01/90
52-23-11		518	Dec01/90
52-23-11		519	Dec01/90
52-23-11		520	Dec01/90
52-23-11		521	Jun01/98
52-23-11		522	Jun01/98
52-23-11		523	Dec01/90
52-23-11		524	Jun01/98
52-23-11		525	Jun01/98
52-23-13		401	Dec01/90
52-23-13		402	Dec01/90
52-23-13		403	Dec01/96
52-23-13		404	Dec01/96
52-23-14		401	Dec01/90
52-23-14		402	Dec01/90
52-23-14		403	Dec01/90
52-23-14		404	Dec01/90
52-23-18		401	Dec01/90
52-23-18		402	Dec01/90
52-23-18		403	Dec01/90
52-23-18		801	Dec01/90
52-23-18		802	Dec01/90
52-23-18		803	Dec01/90
52-23-18		804	Dec01/90
52-23-18		805	Dec01/90
52-23-21		401	Dec01/90
52-23-21		402	Dec01/90
52-23-21		403	Dec01/90
52-23-21		404	Dec01/90
52-23-21		405	Dec01/90
52-23-21		406	Dec01/90
52-23-21		407	Dec01/90
52-23-21		408	Dec01/90
52-23-21		409	Dec01/90
52-23-21		410	Dec01/90
52-23-21		411	Dec01/90
52-23-21		412	Dec01/90
52-23-21		413	Dec01/90
52-23-21		414	Dec01/90
52-23-21		415	Jun01/96
52-23-21		416	Dec01/90
52-23-21		417	Dec01/90
52-23-21		418	Dec01/90

CH/SE/SU	C	PAGE	DATE	CH/SE/SU	C	PAGE	DATE	CH/SE/SU	C	PAGE	DATE
52-23-21		419	Dec01/90	52-23-22		605	Dec01/90	52-30-00		31	Dec01/98
52-23-21		420	Dec01/90	52-23-22		606	Dec01/90	52-30-00		301	Dec01/99
52-23-21		421	Dec01/90	52-23-22		607	Dec01/90	52-30-00		302	Dec01/99
52-23-21		501	Dec01/90	52-23-22		608	Dec01/90	52-30-00		303	Jun01/92
52-23-21		502	Dec01/90	52-23-31		401	Dec01/90	52-30-00		304	Dec01/99
52-23-21		503	Dec01/90	52-23-31		402	Dec01/90	52-30-00		305	Jun01/92
52-23-21		504	Dec01/90	52-23-31		403	Dec01/90	52-30-00		701	Dec01/90
52-23-21		505	Dec01/90	52-23-31		404	Dec01/90	52-30-00		702	Dec01/90
52-23-21		506	Dec01/90	52-23-31		405	Dec01/90	52-30-00		901	Jun01/95
52-23-21		507	Dec01/90	52-23-31		406	Dec01/90	52-30-00		902	Jun01/95
52-23-21		508	Dec01/90	52-23-31		407	Dec01/90	52-30-13		401	Jun01/96
52-23-21		509	Dec01/90	52-23-31		408	Dec01/90	52-30-13		402	Jun01/96
52-23-21		510	Dec01/90	52-23-31		409	Dec01/90	52-30-13		403	Jun01/96
52-23-21		511	Dec01/90	52-23-31		410	Dec01/90	52-30-13		404	Jun01/96
52-23-21		512	Dec01/90	52-23-31		411	Dec01/90	52-30-13		405	Jun01/96
52-23-21		513	Dec01/90	52-23-31		412	Dec01/90	52-30-18		401	Dec01/92
52-23-21		514	Dec01/90	52-23-31		601	Dec01/90	52-30-18		402	Dec01/90
52-23-21		515	Dec01/90	52-23-31		602	Dec01/90	52-30-18		403	Dec01/90
52-23-21		516	Dec01/90	52-23-31		603	Dec01/90	52-30-18		404	Dec01/90
52-23-21		601	Dec01/90	52-23-31		604	Dec01/90	52-30-18		405	Dec01/92
52-23-21		602	Dec01/90					52-30-18		801	Dec01/90
52-23-21		603	Dec01/90	52-30-00		1	Dec01/98	52-30-18		802	Dec01/90
52-23-21		604	Dec01/90	52-30-00		2	Dec01/98	52-30-18		803	Dec01/90
52-23-21		605	Dec01/90	52-30-00		3	Jun01/96	52-30-18		804	Dec01/90
52-23-21		606	Dec01/90	52-30-00		4	Jun01/96	52-30-18		805	Dec01/90
52-23-21		607	Dec01/90	52-30-00		5	Jun01/96	52-30-18		806	Dec01/90
52-23-21		608	Dec01/90	52-30-00		6	Jun01/96	52-30-18		807	Dec01/90
52-23-21		609	Dec01/90	52-30-00		7	Jun01/96	52-30-18		808	Jun01/01
52-23-21		610	Dec01/90	52-30-00		8	Jun01/96	52-30-21		401	Dec01/90
52-23-21		611	Dec01/90	52-30-00		9	Jun01/96	52-30-21		402	Dec01/90
52-23-21		612	Dec01/90	52-30-00		10	Jun01/96	52-30-21		403	Dec01/90
52-23-21		613	Dec01/90	52-30-00		11	Jun01/96	52-30-21		404	Dec01/90
52-23-21		614	Dec01/90	52-30-00		12	Jun01/96	52-30-21		405	Dec01/90
52-23-22		401	Dec01/90	52-30-00		13	Jun01/96	52-30-21		406	Dec01/90
52-23-22		402	Dec01/90	52-30-00		14	Jun01/96	52-30-21		407	Dec01/90
52-23-22		403	Dec01/90	52-30-00		15	Dec01/98	52-30-21		408	Dec01/90
52-23-22		404	Dec01/90	52-30-00		16	Dec01/98	52-30-21		409	Dec01/90
52-23-22		405	Dec01/90	52-30-00		17	Jun01/96	52-30-21		410	Dec01/90
52-23-22		406	Dec01/90	52-30-00		18	Dec01/98	52-30-21		411	Dec01/90
52-23-22		407	Dec01/90	52-30-00		19	Jun01/96	52-30-21		412	Dec01/90
52-23-22		408	Dec01/90	52-30-00		20	Dec01/98	52-30-21		413	Dec01/90
52-23-22		409	Dec01/90	52-30-00		21	Jun01/08	52-30-21		414	Dec01/90
52-23-22		410	Dec01/90	52-30-00		22	Dec01/98	52-30-21		415	Dec01/90
52-23-22		501	Dec01/90	52-30-00		23	Dec01/98	52-30-21		416	Dec01/90
52-23-22		502	Dec01/90	52-30-00		24	Dec01/98	52-30-21		417	Dec01/90
52-23-22		503	Dec01/90	52-30-00		25	Dec01/98	52-30-21		501	Dec01/95
52-23-22		504	Dec01/90	52-30-00		26	Dec01/98	52-30-21		502	Mar01/03
52-23-22		601	Dec01/90	52-30-00		27	Dec01/98	52-30-21		503	Dec01/90
52-23-22		602	Dec01/90	52-30-00		28	Dec01/98	52-30-21		504	Dec01/90
52-23-22		603	Dec01/90	52-30-00		29	Dec01/98	52-30-21		505	Mar01/03
52-23-22		604	Dec01/90	52-30-00		30	Dec01/98	52-30-21		506	Mar01/03

CH/SE/SU	C	PAGE	DATE
52-30-21		507	Jun01/04
52-30-21		508	Mar01/03
52-30-21		509	Mar01/03
52-30-21		510	Mar01/03
52-30-21		511	Mar01/03
52-30-21		512	Mar01/03
52-30-21		513	Mar01/03
52-30-21		514	Mar01/03
52-30-21		515	Mar01/03
52-30-21		516	Mar01/03
52-30-21		517	Mar01/03
52-30-21		518	Mar01/03
52-30-21		519	Mar01/03
52-30-21		601	Jun01/97
52-30-21		602	Jun01/05
52-30-21		603	Dec01/90
52-30-21		604	Dec01/90
52-30-21		605	Jun01/05
52-30-21		606	Jun01/05
52-30-21		607	Dec01/90
52-30-21		608	Mar01/03
52-30-21		609	Dec01/90
52-30-21		610	Dec01/90
52-30-21		611	Jun01/05
52-30-21		612	Jun01/97
52-30-21		613	Jun01/05
52-30-21		614	Jun01/05
52-30-21		615	Jun01/97
52-30-31		401	Dec01/99
52-30-31		402	Dec01/99
52-30-31		403	Dec01/90
52-30-31		404	Jun01/04
52-30-31		405	Jun01/04
52-30-31		406	Dec01/90
52-30-31		407	Jun01/04
52-30-31		408	Jun01/04
52-31-11		401	Dec01/99
52-31-11		402	Dec01/98
52-31-11		403	Dec01/90
52-31-11		404	Jun01/92
52-31-11		405	Dec01/98
52-31-11		406	Jun01/92
52-31-11		407	Jun01/92
52-31-11		408	Dec01/99
52-31-11		409	Dec01/98
52-31-11		410	Dec01/99
52-31-11		411	Jun01/92
52-31-11		412	Dec01/94
52-31-11		413	Jun01/92
52-31-11		414	Dec01/98
52-31-11		415	Dec01/98
52-31-11		501	Dec01/98
52-31-11		502	Dec01/98
52-31-11		503	Dec01/90
52-31-11		504	Jun01/04
52-31-11		505	Jun01/92
52-31-11		506	Jun01/92
52-31-11		507	Jun01/92
52-31-11		508	Jun01/04
52-31-11		509	Jun01/04
52-31-11		601	Dec01/99
52-31-11		602	Dec01/99
52-31-11		603	Dec01/99
52-31-11		604	Dec01/99
52-31-11		605	Dec01/99
52-31-11		606	Dec01/99
52-31-11		607	Dec01/99
52-31-11		608	Dec01/99
52-31-11		609	Dec01/99
52-31-11		610	Dec01/99
52-31-11		611	Dec01/99
52-31-11		612	Dec01/99
52-32-11		401	Dec01/99
52-32-11		402	Dec01/98
52-32-11		403	Dec01/98
52-32-11		404	Dec01/98
52-32-11		405	Dec01/98
52-32-11		406	Dec01/98
52-32-11		407	Jun01/00
52-32-11		408	Jun01/00
52-32-11		409	Dec01/99
52-32-11		410	Dec01/98
52-32-11		411	Dec01/98
52-32-11		501	Dec01/98
52-32-11		502	Jun01/92
52-32-11		503	Dec01/90
52-32-11		504	Dec01/90
52-32-11		505	Jun01/92
52-32-11		506	Dec01/90
52-32-11		507	Jun01/01
52-32-11		508	Dec01/90
52-32-11		509	Jun01/06
52-32-11		510	Dec01/98
52-32-11		601	Jun01/92
52-32-11		602	Dec01/98
52-32-11		603	Dec01/98
52-32-11		604	Dec01/98
52-32-11		605	Dec01/98
52-32-11		606	Dec01/98
52-33-00		1	Jun01/08
52-33-00		2	Dec01/90
52-33-00		3	Dec01/90
52-33-00		4	Jun01/08
52-33-00		5	Dec01/90
52-33-00		6	Dec01/90
52-33-00		7	Jun01/08
52-33-00		8	Jun01/08
52-33-00		9	Jun01/08
52-33-00		10	Jun01/08
52-33-00		11	Jun01/08
52-33-00		12	Jun01/08
52-33-00		13	Jun01/08
52-33-00		14	Jun01/08
52-33-00		15	Jun01/08
52-33-00		16	Jun01/08
52-33-00		17	Jun01/08
52-33-00		18	Jun01/08
52-33-00		19	Jun01/08
52-33-00		301	Jun01/08
52-33-00		302	Jun01/08
52-33-00		303	Jun01/08
52-33-00		304	Jun01/08
52-33-00		305	Jun01/08
52-33-00		601	Dec01/90
52-33-00		602	Dec01/90
52-33-00		603	Dec01/90
52-33-11		401	Jun01/92
52-33-11		402	Dec01/90
52-33-11		403	Jun01/92
52-33-12		401	Jun01/92
52-33-12		402	Jun01/92
52-33-12		403	Dec01/90
52-33-13		401	Jun01/92
52-33-13		402	Dec01/90
52-33-13		403	Jun01/92
52-33-14		401	Jun01/92
52-33-14		402	Dec01/90
52-33-14		403	Jun01/92
52-33-15		401	Dec01/90
52-33-15		402	Jun01/02
52-33-15		403	Dec01/90
52-33-15		404	Dec01/90
52-33-15		405	Dec01/91
52-33-15		406	Dec01/90
52-33-17		401	Dec01/90
52-33-17		402	Dec01/90
52-33-17		403	Dec01/90
52-33-18		401	Jun01/07
52-33-18		402	Jun01/09
52-33-18		403	Jun01/09

CH/SE/SU	C	PAGE	DATE
52-33-18		404	Jun01/09
52-33-18		405	Dec01/90
52-33-18		406	Dec01/90
52-33-18		407	Jun01/09
52-33-18		408	Jun01/09
52-33-22		401	Jun01/92
52-33-22		402	Dec01/90
52-33-22		403	Jun01/92
52-33-24		401	Jun01/06
52-33-24		402	Dec01/90
52-33-24		403	Jun01/06
52-33-24		404	Jun01/06
52-34-00		1	Dec01/90
52-34-00		2	Dec01/90
52-34-00		3	Dec01/90
52-34-00		4	Dec01/90
52-34-00		5	Dec01/90
52-34-00		6	Dec01/90
52-34-00		601	Dec01/92
52-34-00		602	Dec01/98
52-34-00		603	Dec01/98
52-34-00		901	Jun01/06
52-34-00		902	Jun01/04
52-34-11		401	Dec01/98
52-34-11		402	Dec01/98
52-34-11		403	Dec01/98
52-34-11		404	Jun01/92
52-34-11		405	Dec01/98
52-34-11		501	Dec01/98
52-34-11		502	Jun01/92
52-34-11		503	Dec01/90
52-34-11		504	Dec01/90
52-34-11		505	Dec01/90
52-34-11		506	Dec01/90
52-34-11		507	Dec01/90
52-34-11		508	Dec01/90
52-34-11		509	Dec01/90
52-34-11		510	Dec01/98
52-34-11		511	Dec01/98
52-34-12		401	Dec01/90
52-34-12		402	Dec01/90
52-34-12		403	Dec01/90
52-34-12		404	Dec01/90
52-34-12		405	Dec01/90
52-34-12		601	Dec01/98
52-34-12		602	Jun01/08
52-34-12		603	Dec01/98
52-34-12		604	Dec01/98
52-34-18		401	Dec01/90
52-34-18		402	Dec01/90
52-34-18		403	Dec01/90
52-34-18		801	Dec01/90
52-34-18		802	Dec01/90
52-34-18		803	Dec01/90
52-34-18		804	Dec01/90
52-34-18		805	Dec01/90
52-34-21		401	Dec01/90
52-34-21		402	Jun01/04
52-34-21		403	Dec01/90
52-34-21		404	Jun01/04
52-34-21		405	Mar01/03
52-34-21		406	Jun01/04
52-34-21		407	Mar01/03
52-34-21		408	Mar01/03
52-34-21		409	Mar01/03
52-34-21		410	Mar01/03
52-34-21		411	Jun01/04
52-34-21		412	Jun01/04
52-34-21		413	Mar01/03
52-34-21		601	Dec01/90
52-34-21		602	Dec01/90
52-34-21		603	Dec01/90
52-34-31		401	Dec01/90
52-34-31		402	Dec01/90
52-34-31		403	Dec01/90
52-34-31		404	Dec01/90
52-34-31		405	Dec01/90
52-34-31		406	Dec01/90
52-34-31		601	Dec01/90
52-34-31		602	Dec01/90
52-34-31		603	Dec01/90
52-34-41		401	Jun01/06
52-34-41		402	Dec01/90
52-34-41		403	Jun01/06
52-34-41		404	Jun01/06
52-34-41		601	Dec01/90
52-34-41		602	Dec01/90
52-35-00		1	Dec01/90
52-35-00		2	Dec01/90
52-35-00		3	Dec01/90
52-35-00		4	Dec01/90
52-35-00		5	Dec01/90
52-35-00		6	Dec01/90
52-35-00		7	Dec01/90
52-35-00		8	Dec01/90
52-35-00		9	Dec01/90
52-35-00		501	Jun01/92
52-35-00		502	Jun01/92
52-35-00		503	Dec01/90
52-35-00		504	Jun01/92
52-35-12		401	Jun01/05
52-35-12		402	Jun01/05
52-35-12		403	Jun01/05
52-35-12		404	Jun01/05
52-35-12		405	Jun01/05
52-35-13		401	Jun01/05
52-35-13		402	Jun01/05
52-35-13		403	Jun01/05
52-35-13		404	Jun01/97
52-35-13		405	Jun01/97
52-35-13		406	Jun01/97
52-35-13		407	Jun01/97
52-35-13		501	Jun01/09
52-35-13		502	Jun01/92
52-35-13		503	Jun01/09
52-40-00		1	Dec01/90
52-41-00		1	Jun01/07
52-41-00		2	Dec01/90
52-41-00		3	Dec01/06
52-41-00		4	Dec01/06
52-41-00		5	Jun01/01
52-41-00		6	Dec01/93
52-41-00		7	Jun01/93
52-41-00		8	Jun01/93
52-41-00		9	Jun01/04
52-41-00		10	Jun01/93
52-41-00		11	Jun01/93
52-41-00		12	Jun01/04
52-41-00		13	Jun01/04
52-41-00		14	Dec01/93
52-41-00		15	Dec01/93
52-41-00		16	Dec01/93
52-41-00		17	Dec01/93
52-41-00		18	Dec01/93
52-41-00		19	Dec01/93
52-41-00		20	Dec01/93
52-41-12		401	Dec01/90
52-41-12		402	Dec01/90
52-41-12		403	Dec01/90
52-41-13		401	Dec01/90
52-41-13		402	Dec01/90
52-41-14	R	401	Jun01/10
52-41-14	R	402	Jun01/10
52-41-14	R	403	Jun01/10
52-41-14	R	404	Jun01/10
52-41-14	R	405	Jun01/10
52-41-14	R	406	Jun01/10
52-41-14	N	407	Jun01/10
52-41-14		501	Jun01/94

CH/SE/SU	C	PAGE	DATE
52-41-18		401	Dec01/90
52-41-18		402	Dec01/90
52-41-18		403	Dec01/90
52-41-21		401	Dec01/90
52-41-21		402	Dec01/90
52-41-21		403	Dec01/90
52-42-00		1	Jun01/08
52-42-00		2	Jun01/05
52-42-00		3	Dec01/90
52-42-00		4	Dec01/90
52-42-00		5	Dec01/90
52-42-00		6	Dec01/90
52-42-00		7	Dec01/90
52-42-00		8	Dec01/90
52-42-00		9	Dec01/90
52-42-00		10	Dec01/90
52-42-00		11	Jun01/04
52-42-00		12	Jun01/94
52-42-00		13	Dec01/90
52-42-00		14	Dec01/90
52-42-00		15	Jun01/05
52-42-00		16	Jun01/05
52-42-00		17	Jun01/04
52-42-00		18	Jun01/05
52-42-00		19	Jun01/04
52-42-00		601	Jun01/08
52-42-00		602	Jun01/08
52-42-00		603	Jun01/08
52-42-13		401	Dec01/90
52-42-13		402	Dec01/90
52-42-15		401	Dec01/90
52-42-15		402	Dec01/90
52-42-15		403	Dec01/90
52-42-15		404	Dec01/90
52-42-17		401	Dec01/92
52-42-17		402	Dec01/92
52-42-17		403	Dec01/92
52-42-17		901	Dec01/99
52-42-17		902	Dec01/99
52-42-17		903	Dec01/99
52-42-19		401	Dec01/06
52-42-19		402	Dec01/06
52-42-19		403	Jun01/01
52-42-19		404	Dec01/06
52-42-19		405	Dec01/93
52-42-19		406	Jun01/93
52-42-19		407	Dec01/93
52-42-19		601	Dec01/06
52-42-19		602	Dec01/06
52-42-22		401	Dec01/90
52-42-22		402	Jun01/05
52-42-22		403	Dec01/90
52-50-00		1	Dec01/90
52-51-00		1	Jun01/06
52-51-00		2	Jun01/06
52-51-00		3	Jun01/06
52-51-00		4	Jun01/06
52-51-00		5	Dec01/06
52-51-00		6	Jun01/06
52-51-00		7	Jun01/06
52-51-00		8	Jun01/07
52-51-00		9	Jun01/06
52-51-00		10	Jun01/06
52-51-00		11	Jun01/06
52-51-00		12	Jun01/06
52-51-00		13	Jun01/06
52-51-00		501	Jun01/09
52-51-00		502	Dec01/06
52-51-00		503	Dec01/06
52-51-00		504	Dec01/06
52-51-00		505	Dec01/06
52-51-00		506	Dec01/06
52-51-00		507	Jun01/09
52-51-00		508	Jun01/09
52-51-00		509	Jun01/09
52-51-00		510	Dec01/06
52-51-00		511	Dec01/06
52-51-00		512	Dec01/06
52-51-00		601	Jun01/05
52-51-00		602	Jun01/04
52-51-00		603	Jun01/04
52-51-00		604	Jun01/04
52-51-00		605	Jun01/04
52-51-00		801	Jun01/08
52-51-00		802	Jun01/05
52-51-00		803	Jun01/08
52-51-00		804	Jun01/08
52-51-00		805	Jun01/08
52-51-00		806	Jun01/08
52-51-00		807	Jun01/08
52-51-00		808	Jun01/08
52-51-00		901	Jun01/06
52-51-00		902	Jun01/06
52-51-00		903	Jun01/06
52-51-00		904	Jun01/04
52-51-00		905	Jun01/06
52-51-00		906	Jun01/06
52-51-00		907	Jun01/04
52-51-00		908	Jun01/09
52-51-00		909	Jun01/09
52-51-00		910	Jun01/09
52-51-00		911	Jun01/09
52-51-00		912	Jun01/09
52-51-00		913	Jun01/09
52-51-11		401	Jun01/06
52-51-11		402	Jun01/06
52-51-11		403	Jun01/06
52-51-11		404	Jun01/06
52-51-11		405	Jun01/06
52-51-11		406	Jun01/06
52-51-11		407	Jun01/06
52-51-11		408	Jun01/06
52-51-11		409	Jun01/06
52-51-11		410	Jun01/06
52-51-11		411	Jun01/06
52-51-11		412	Jun01/06
52-51-11		413	Jun01/06
52-51-11		414	Jun01/06
52-51-11		501	Jun01/06
52-51-11		502	Jun01/04
52-51-11		503	Jun01/06
52-51-12		401	Jun01/04
52-51-12		402	Jun01/04
52-51-12		403	Jun01/04
52-51-12		404	Jun01/04
52-51-13		401	Jun01/08
52-51-13		402	Mar01/03
52-51-13		403	Jun01/08
52-51-14		401	Jun01/06
52-51-14		402	Mar01/03
52-51-14		403	Jun01/06
52-51-16		401	Jun01/06
52-51-16		402	Jun01/03
52-51-16		403	Jun01/06
52-51-18		401	Jun01/06
52-51-18		402	Jun01/06
52-51-18		403	Jun01/05
52-51-18		404	Jun01/06
52-51-18		405	Jun01/06
52-51-21		401	Jun01/04
52-51-21		402	Jun01/09
52-51-21		403	Jun01/09
52-51-21		404	Jun01/09
52-52-00		1	Jun01/04
52-52-00		2	Jun01/04
52-52-00		3	Jun01/04
52-52-00		4	Jun01/04
52-52-00		5	Jun01/04
52-52-00		6	Jun01/04

CH/SE/SU	C	PAGE	DATE
52-52-00		7	Jun01/04
52-52-00		8	Jun01/04
52-52-15		401	Dec01/90
52-52-15		402	Dec01/90
52-52-15		601	Dec01/90
52-53-00		1	Dec01/90
52-53-00		2	Dec01/90
52-70-00		1	Jun01/08
52-70-00		2	Dec01/90
52-70-00		3	Dec01/90
52-70-00		4	Dec01/90
52-70-00		5	Dec01/98
52-70-00		6	Jun01/08
52-70-00		7	Jun01/08
52-70-00		8	Jun01/08
52-70-00		9	Jun01/08
52-70-00		10	Jun01/08
52-70-00		11	Jun01/08
52-70-00		12	Jun01/08
52-70-00		13	Jun01/08
52-71-00		1	Dec01/06
52-71-00		2	Dec01/06
52-71-00		3	Dec01/06
52-71-00		4	Jun01/04
52-71-00		5	Jun01/04
52-71-00		6	Jun01/04
52-71-00		7	Jun01/04
52-71-00		8	Jun01/04
52-71-00		9	Dec01/06
52-71-00		10	Dec01/06
52-71-00		11	Dec01/06
52-71-00		12	Dec01/06
52-71-00		13	Jun01/04
52-71-00		14	Jun01/04
52-71-00		15	Jun01/04
52-71-00		16	Dec01/06
52-71-00		17	Dec01/06
52-71-00		18	Dec01/06
52-71-00		19	Dec01/06
52-71-00		20	Dec01/06
52-71-00		21	Dec01/06
52-71-00		22	Dec01/06
52-71-00		23	Jun01/04
52-71-00		501	Jun01/94
52-71-00		502	Jun01/94
52-71-00		503	Dec01/90
52-71-00		504	Jun01/94
52-71-00		505	Jun01/94
52-71-00		506	Jun01/94
52-71-00		507	Jun01/94
52-71-00		508	Jun01/94
52-71-00		509	Jun01/94
52-71-11		401	Dec01/98
52-71-11		402	Dec01/06
52-71-11		403	Dec01/90
52-71-11		404	Dec01/92
52-71-11		405	Dec01/90
52-71-11		406	Dec01/90
52-71-11		407	Dec01/06
52-71-11		408	Dec01/06
52-71-11		409	Dec01/06
52-71-11		410	Jun01/04
52-71-11		411	Jun01/04
52-71-11		412	Jun01/04
52-71-11		413	Jun01/04
52-71-11		414	Dec01/06
52-71-11		415	Jun01/04
52-71-11		416	Dec01/06
52-71-11		417	Dec01/06
52-71-11		418	Jun01/04
52-71-11		419	Jun01/04
52-71-11		501	Dec01/96
52-71-11		502	Dec01/96
52-71-11		503	Dec01/06
52-71-11		504	Dec01/96
52-71-11		505	Dec01/96
52-71-11		506	Dec01/96
52-71-11		507	Dec01/96
52-71-11		508	Dec01/96
52-71-11		509	Dec01/96
52-71-11		510	Dec01/06
52-71-11		511	Dec01/06
52-71-11		512	Dec01/06
52-71-11		513	Dec01/06
52-71-11		514	Jun01/04
52-71-11		515	Dec01/96
52-71-11		516	Dec01/96
52-71-11		517	Dec01/96
52-71-11		518	Jun01/04
52-71-11		519	Dec01/96
52-71-11		520	Jun01/04
52-71-11		521	Jun01/04
52-71-11		522	Jun01/04
52-71-11		523	Jun01/04
52-71-11		524	Jun01/04
52-71-11		525	Jun01/04
52-71-11		526	Jun01/04
52-71-11		527	Jun01/04
52-71-11		528	Jun01/04
52-73-00		1	Dec01/06
52-73-00		2	Jun01/92
52-73-00		3	Dec01/90
52-73-00		4	Dec01/90
52-73-00		5	Dec01/98
52-73-00		6	Dec01/06
52-73-00		7	Dec01/06
52-73-00		8	Dec01/06
52-73-00		9	Dec01/06
52-73-00		10	Dec01/06
52-73-00		11	Dec01/06
52-73-00		12	Dec01/06
52-73-00		13	Jun01/07
52-73-00		14	Jun01/07
52-73-00		15	Dec01/06
52-73-00		16	Dec01/06
52-73-00		17	Dec01/06
52-73-00		18	Dec01/06
52-73-00		19	Dec01/06
52-73-00		20	Dec01/06
52-73-00		21	Dec01/06
52-73-00		22	Dec01/06
52-73-00		23	Dec01/06
52-73-00		24	Dec01/06
52-73-00		25	Dec01/06
52-73-00		26	Dec01/06
52-73-00		27	Dec01/06
52-73-00		28	Dec01/06
52-73-00		29	Dec01/06
52-73-00		30	Dec01/06
52-73-00		31	Dec01/06
52-73-00		32	Dec01/06
52-73-00		33	Dec01/06
52-73-00		34	Dec01/06
52-73-00		35	Dec01/06
52-73-00		36	Dec01/06
52-73-00		37	Dec01/06
52-73-00		38	Dec01/06
52-73-00		39	Dec01/06
52-73-00		40	Dec01/06
52-73-00		41	Dec01/06
52-73-00		42	Dec01/06
52-73-00		43	Dec01/06
52-73-00		44	Dec01/06
52-73-00		45	Dec01/06
52-73-00		46	Dec01/06
52-73-00		47	Dec01/06
52-73-00		48	Dec01/06
52-73-00		49	Dec01/06
52-73-00		50	Dec01/06
52-73-00		51	Dec01/06

CH/SE/SU	C	PAGE	DATE
52-73-00		52	Dec01/06
52-73-00		53	Dec01/06
52-73-00		54	Dec01/06
52-73-00		55	Dec01/06
52-73-00		56	Dec01/06
52-73-00		57	Dec01/06
52-73-00		501	Dec01/98
52-73-00		502	Dec01/06
52-73-00		503	Dec01/06
52-73-00		504	Dec01/06
52-73-00		505	Dec01/06
52-73-00		506	Dec01/06
52-73-00		507	Dec01/06
52-73-00		508	Jun01/04
52-73-00		509	Dec01/06
52-73-00		510	Dec01/06
52-73-00		511	Dec01/06
52-73-00		512	Dec01/06
52-73-00		513	Dec01/06
52-73-00		514	Dec01/06
52-73-00		515	Dec01/06
52-73-00		516	Dec01/06
52-73-00		517	Dec01/06
52-73-00	R	518	Jun01/10
52-73-00	R	519	Jun01/10
52-73-00	R	520	Jun01/10
52-73-00	R	521	Jun01/10
52-73-00	R	522	Jun01/10
52-73-11		401	Dec01/06
52-73-11		402	Dec01/06
52-73-11		403	Dec01/06
52-73-11		404	Dec01/06
52-73-12		401	Jun01/04
52-73-12		402	Jun01/04
52-73-12		403	Jun01/04
52-73-12		404	Dec01/06
52-73-12		405	Dec01/06
52-73-13		401	Jun01/05
52-73-13		402	Dec01/06
52-73-13		403	Dec01/06
52-73-13		404	Dec01/06
52-73-13		405	Dec01/06
52-73-13		406	Dec01/06
52-73-13		407	Dec01/06
52-73-13		408	Dec01/06
52-73-13		409	Dec01/06
52-73-13		501	Jun01/05
52-73-13		502	Dec01/06
52-73-13		503	Dec01/06
52-73-13		504	Dec01/06
52-73-13		505	Dec01/90
52-73-13		506	Dec01/90
52-73-13		507	Dec01/90
52-73-13		508	Dec01/06
52-73-13		509	Dec01/90
52-73-13		510	Dec01/06
52-73-13		511	Dec01/06
52-73-13		512	Dec01/06
52-73-13		513	Dec01/06
52-73-13		514	Dec01/06
52-73-13		515	Dec01/06
52-73-13		516	Dec01/06
52-73-14		401	Dec01/06
52-73-14		402	Dec01/90
52-73-14		403	Dec01/06
52-73-14		404	Dec01/06
52-73-14		405	Dec01/06
52-73-15		401	Dec01/06
52-73-15		402	Jun01/04
52-73-15		403	Dec01/06
52-73-15		404	Dec01/06
52-73-16		401	Dec01/06
52-73-16		402	Jun01/04
52-73-16		403	Dec01/06
52-73-16		404	Dec01/06
52-73-17		401	Jun01/06
52-73-17		402	Dec01/98
52-73-17		403	Jun01/06
52-73-18		401	Jun01/07
52-73-18		402	Dec01/98
52-73-18		403	Jun01/06
52-73-18		404	Dec01/98
52-73-18		405	Jun01/06
52-80-00		1	Dec01/90
52-80-00		2	Dec01/90
52-81-00		1	Dec01/90
52-81-00		2	Dec01/90
52-81-00		701	Dec01/90
52-82-00		1	Dec01/90
52-82-00		2	Dec01/90

CHAPTER 52

DOORS

TABLE OF CONTENTS

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
DOORS	52-00-00			
Description and Operation			1	ALL
General			1	ALL
Passenger/Crew Doors			3	ALL
Passenger Compartment Emergency Exit Doors			3	ALL
Cargo Compartment Doors			5	ALL
Maintenance and Service Doors			5	ALL
Fixed Interior Doors			5	ALL
Landing Gear Doors			8	ALL
Servicing			301	ALL
Doors - Operation Limitations			301	ALL
Inspection/Check			601	ALL
PASSENGER/CREW DOORS	52-10-00			
General			1	ALL
Component Location			6	ALL
Suspension			6	ALL
Locking Mechanism			6	ALL
Emergency Escape Slide			8	ALL
Release Mechanism			8	ALL
Component Description			27	ALL
Operation			34	ALL
Opening			34	ALL
From Passenger Compartment - Normal Operation			34	ALL
From Outside - Normal Operation			34	ALL
Emergency Operation			38	ALL
Closing			38	ALL
From Passenger Compartment			38	ALL
From Outside			39	ALL
Maintenance Practices			201	ALL
Special Precautions			301	ALL
Maintenance Operation Procedure			301	001-003,
Maintenance Operation Procedure			303	ALL
Relief of System Pressure after Emergency Operation			305	ALL
Adjustment/Test			501	ALL
Adjustment of Upper and Lower Guide Fittings/Stop Fittings (Ref. 52-10-11, P. Block 501)			501	ALL
Adjustment of Door Latches (Ref. 52-10-11, P. Block 501)			501	ALL
Adjustment of Girt Bar Fittings (Ref. 52-10-11, P. Block 501)			501	ALL
Adjustment of Lowering Stop (Ref. 52-10-11, P. Block 501)			501	ALL

Printed in France

	SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
	Adjustment of Compensation Mechanism (Ref. 52-10-11, P. Block 501)			501	ALL
	Adjustment of Door Buffer (Ref. 52-10-11, P. Block 501)			501	ALL
	Adjustment of Support Arm and Connection Links (Ref. 52-10-12, P. Block 501)			501	ALL
	Adjustment of Upper and Lower Guide Arm (Ref. 52-10-12, P. Block 501)			501	ALL
	Adjustment of Door Damper and Emergency Operation Cylinder (Ref. 52-10-14, P. Block 501)			501	ALL
	Adjustment of Door Locking (Ref. 52-10-20, P. Block 501)			501	ALL
	Adjustment of Door Closed Position (Ref. 52-10-20, P. Block 501)			501	ALL
	Adjustment of Door High Position (Ref. 52-10-20, P. Block 501)			501	ALL
	Adjustment of Locking of Door Mechanism in High Position (Ref. 52-10-20, P. Block 501)			501	ALL
	Adjustment of Exterior Control Handle (Ref. 52-10-20, P. Block 501)			501	ALL
	Adjustment of Interior Control Handle (Ref. 52-10-20, P. Block 501)			501	ALL
	Adjustment of Emergency Escape Slide Release Mechanism (Ref. 52-10-30, P. Block 501)			501	ALL
	Adjustment of Switches-Door Warning (Ref. 52-71-11, P. Block 501)			501	ALL
	Adjustment of Limit Switches (Ref. 52-73-13, P. Block 501)			501	ALL
R	Adjustment of Preload of the Cover Plate at FWD Passenger/Crew Door only (Ref. 52-10-11, P. Block 501)			501	ALL
	Cleaning/Painting			701	ALL
	Deactivation/Reactivation			901	ALL
	Ref. : MMEL Sect. 1-52, Item 2			901	ALL
	FWD, AFT PASSENGER/CREW DOORS	52-10-11			
	Adjustment/Test			501	ALL
	Adjustment of Upper and Lower Guide Fittings/Stop Fittings			502	ALL
	Adjustment of Door Latches			510	ALL
	Adjustment of Girt Bar Fittings			516	ALL
	Adjustment of Lowering Stop			520	ALL
	Adjustment of Lowering Stop			520	ALL
	Adjustment of Compensation Mechanism			522	ALL

	SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
	Adjustment of Door Buffer			524	ALL
	Functional Test			527	ALL
R	Check of Pre-load of Cover Plate			531	ALL
	Inspection/Check			601	ALL
	Door Skin, Structure and Water Drain Holes			603	ALL
	Upper and lower guide fittings/ stop fittings and roller fittings			605	ALL
	Door Latches			610	ALL
	Girt Bar Fittings			612	ALL
	Lowering Stop			612	ALL
	Compensation Mechanism			614	ALL
	Door Buffer			614	ALL
	FWD, AFT DOOR SUSPENSION	52-10-12			
	Adjustment/Test			501	ALL
	Adjustment of Support Arm and Connection Links			502	ALL
	Adjustment of Upper and Lower Guide Arm			509	ALL
	Inspection/Check			601	ALL
	FWD, AFT DOOR LINING AND INSULATION	52-10-13			
	Removal/Installation			401	ALL
	Inspection/Check			601	ALL
	FWD, AFT DOOR DAMPER AND EMERGENCY OPERATION CYLINDER	52-10-14			
	Servicing			301	ALL
	Removal/Installation			401	ALL
	Adjustment/Test			501	ALL
	Inspection/Check			601	ALL
	FWD, AFT DOOR SEAL	52-10-18			
	Removal/Installation			401	ALL
	Approved Repairs			801	ALL
	FWD, AFT DOOR LOCKING MECHANISM	52-10-20			
	Adjustment/Test			501	ALL
	Door Locking			503	ALL
	Door Closed Position			505	ALL
	Door High Position			513	ALL
	Locking of Door Mechanism in High Position			514	ALL
	Exterior Control Handle			517	ALL
	Interior Control/Handle			519	ALL
	Inspection/Check			601	ALL
	Door Locking			602	ALL
	Door Closed Position			604	ALL
	Door High Position			608	ALL
	Locking of Door Mechanism in High Position			609	ALL
	Exterior Control Handle			609	ALL
	Interior Control Handle			613	ALL
	FWD, AFT EMERGENCY ESCAPE SLIDE RELEASE MECHANISM	52-10-30			
	Removal/Installation			401	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Removal			402	ALL
Release Mechanism and Emergency Control Handle			402	ALL
Stop lever and Bellcrank Unit			404	ALL
Locking Unit			404	ALL
Bellcrank Unit (Lateral)			409	ALL
Sliders and Girt Bar			409	ALL
Bellcrank Unit (Middle)			411	ALL
Linkage Guide			411	ALL
Blanking Device			414	ALL
Preparation of Replacement Component			414	ALL
Installation			414	ALL
Release Mechanism and Emergency Control Handle			414	ALL
Stop Lever and Bellcrank Unit			416	ALL
Locking Unit			417	ALL
Bellcrank Unit (Lateral)			418	ALL
Sliders and Girt Bar			418	ALL
Bellcrank Unit (Middle)			419	ALL
Linkage Guide			419	ALL
Blanking Device			420	ALL
Adjustment/Test			501	ALL
Inspection/Check			601	ALL
FWD, AFT DOOR LATCH AND STOP FITTINGS	52-10-31			
Removal/Installation			401	ALL
Removal of Door Stop Fitting			402	ALL
Removal of Adjustable Bolt for Door Stop Fitting			402	ALL
Removal of Fuselage Stop Fitting			402	ALL
Removal of Fitting with Guide Roller			404	ALL
Removal of Girt Bar Fitting			404	ALL
Removal of Lowering Stop			404	ALL
Removal of Roller Fitting			404	ALL
Removal of Latch Fitting			407	ALL
Removal of Latch Fitting and Roller			407	ALL
Removal of Upper Guide Fitting			407	ALL
Removal of Lower Guide Fitting			407	ALL
Removal of Guide Arm Fitting			407	ALL
Removal of Lower Guide Fitting			410	ALL
Removal of Guide Arm Fitting			410	ALL
Removal of Upper Support Arm Fitting			410	ALL
Removal of Lower Support Arm Fitting			410	ALL
Installation of Door Stop Fitting			412	ALL
Installation of Adjustable Bolt for Door Stop Fitting			412	ALL
Installation of Fuselage			413	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Stop Fitting				
Installation of Fitting with Guide Roller			413	ALL
Installation of Girt Bar Fitting			413	ALL
Installation of Lowering Stop			414	ALL
Installation of Roller Fitting			414	ALL
Installation of Latch Fitting			414	ALL
Installation of Upper Guide Fitting			414	ALL
Installation of Lower Guide Fitting			414	ALL
Installation of Guide Arm Fitting			414	ALL
Installation of Roller Fitting			415	ALL
Installation of Latch Fitting			415	ALL
Installation of Upper Guide Fitting			415	ALL
Installation of Lower Guide Fitting			415	ALL
Installation of Guide Arm Fitting			416	ALL
Installation of Upper Support Arm Fitting			416	ALL
Installation of Lower Support Arm Fitting			416	ALL
LH AND RH FORWARD PASSENGER/CREW DOOR	52-11-11			
Removal/Installation			401	ALL
DOOR SUSPENSION	52-11-12			
Removal/Installation			401	ALL
Reason for the Job			401	ALL
DOOR LOCKING MECHANISM	52-11-21			
Removal/Installation			401	ALL
AFT PASSENGER/CREW DOOR	52-13-11			
Removal/Installation			401	ALL
SUSPENSION	52-13-12			
Removal/Installation			401	ALL
DOOR LOCKING MECHANISM	52-13-21			
Removal/Installation			401	ALL
Removal of Door Latches and Lining Hinge Arms			405	ALL
Removal of Locking Shaft			406	ALL
Removal of Lowering Shaft			406	ALL
Removal of Interior Control Handle			411	ALL
Removal of Interior Control Handle Latch Assembly			411	ALL
Removal of Exterior Control Handle			411	ALL
Removal of Gearbox and Locking Hook			411	ALL
Removal of Twin Lever			412	ALL
Removal of Lifting Shaft			412	ALL
Removal of Torsion Bar Spring and Torque Shaft			413	ALL
Removal of Upper Connection Link			414	ALL
Removal of Lower Connection Link			414	ALL
Installation of Door Latches and Lining Hinge Arms			422	ALL
Installation of Locking Shaft			422	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Installation of Lowering Shaft			423	ALL
Installation of Interior Control Handle			424	ALL
Installation of Interior Control Handle Latch Assembly			424	ALL
Installation of Exterior Control Handle			424	ALL
Installation of Gearbox and Locking Hook			425	ALL
Installation of Twin Lever			427	ALL
Installation of Lifting Shaft			427	ALL
Installation of Torsion bar Spring and Torque Shaft			429	ALL
Installation of Upper Connection Link			430	ALL
Installation of Lower Connection Link			431	ALL
EMERGENCY EXIT	52-20-00			
EMERGENCY EXIT	52-23-00			
Description and Operation			1	ALL
Special Precautions			301	ALL
Inspection/Check			601	ALL
Cleaning/Painting			701	ALL
Cleaning			702	ALL
Painting			702	ALL
Exit Structure			702	ALL
Seal Mount and Seal Retainers			702	ALL
EMERGENCY EXIT	52-23-11			
Removal/Installation			401	ALL
Adjustment/Test			501	ALL
Adjustment of Emergency Exit to Fuselage Gaps			503	ALL
Adjustment of Skin Offset			508	ALL
Adjustment of Stop Fittings			509	ALL
Adjustment of Centering Fitting			510	ALL
Adjustment of Damper Cylinder and Support Cable			510	ALL
Adjustment of Guide Fittings and Lowering Stop			515	ALL
Adjustment of Cover Plate			517	ALL
Functional Test			520	ALL
LINING AND INSULATION	52-23-13			
Removal/Installation			401	ALL
DAMPER CYLINDER	52-23-14			
Removal/Installation			401	ALL
SEAL	52-23-18			
Removal/Installation			401	ALL
Approved Repairs			801	ALL
LOCKING MECHANISM	52-23-21			
Removal/Installation			401	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Removal of Pushrod - Typical			403	ALL
Removal of Interior Control Handle and Splined Shaft			403	ALL
Removal of Locking Indicator			403	ALL
Removal of Exterior Control Handle and Splined Shaft			406	ALL
Removal of Lowering Shafts			406	ALL
Removal of Lifting Shaft			409	ALL
Removal of Lift Safety Lock Mechanism			409	ALL
Removal of Hinge Rods			413	ALL
Installation of Pushrod - Typical			415	ALL
Installation of Interior Control Handle and Splined Shaft			415	ALL
Installation of Locking Indicator			417	ALL
Installation of Exterior Control Handle and Splined Shaft			417	ALL
Installation of Lowering Shafts			418	ALL
Installation of Lifting Shaft			418	ALL
Installation of Lift Safety Lock Mechanism			419	ALL
Installation of Hinge Rods			419	ALL
Adjustment/Test			501	ALL
Adjustment of Pushrods			503	ALL
Adjustment of Interior Control Handle			503	ALL
Adjustment of Lifting Shaft Stop			508	ALL
Adjustment of Exterior Control Handle			509	ALL
Adjustment of Locking Indicator			512	ALL
Adjustment of Lowering Shafts			512	ALL
Adjustment of Lift Safety Lock Mechanism			513	ALL
Adjustment of Tension Springs			513	ALL
Inspection/Check			601	ALL
EMERGENCY ESCAPE SLIDE RELEASE MECHANISM	52-23-22			
Removal/Installation			401	ALL
Removal of Emergency Control Handle			403	ALL
Removal of Pushrod - Typical			403	ALL
Removal of Upper Assembly			403	ALL
Removal of Lower Assembly			403	ALL
Removal of Connection Assembly			407	ALL
Installation of Emergency Control Handle			409	ALL
Installation of Pushrod - Typical			409	ALL
Installation of Upper Assembly			409	ALL
Installation of Lower Assembly			409	ALL
Installation of Connection Assembly			409	ALL
Adjustment/Test			501	ALL
Adjustment of Pushrods			502	ALL
Adjustment of Lower Assembly			502	ALL

Printed in France

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Inspection/Check			601	ALL
FITTINGS	52-23-31			
Removal/Installation			401	ALL
Removal of Stop Fittings			403	ALL
Removal of Upper and Lower Guide and Roller Fittings			403	ALL
Removal of Centering and Roller Fittings			404	ALL
Removal of Lowering Stop Fitting			404	ALL
Removal of Hinge Rod Attach Fittings			404	ALL
Removal of Support Cable Assembly			404	ALL
Installation of Stop Fittings			409	ALL
Installation of Upper and Lower Guide and Roller Fittings			409	ALL
Installation of Centering and Roller Fittings			410	ALL
Installation of Lowering Stop Fitting			410	ALL
Installation of Hinge Rod Attach Fittings			411	ALL
Installation of Support Cable Assembly			411	ALL
Inspection/Check			601	ALL
CARGO COMPARTMENT DOORS	52-30-00			
Description and Operation			1	ALL
General			1	ALL
Component Location			3	ALL
FWD Cargo Compartment Door			3	ALL
AFT Cargo Compartment Door			7	ALL
Description			11	ALL
Operation			16	ALL
Unlocking and Opening of FWD and AFT Cargo Compartment Doors			20	ALL
Closing and Locking FWD and AFT Cargo Compartment Doors			20	ALL
Opening and Closing of FWD and AFT Cargo Compartment Doors Using Hand Pump			24	ALL
Opening and Closing Procedure			25	ALL
Opening by Means of Electric Hydraulic Pump			25	001-003,
Closing by Means of Electric Hydraulic Pump			25	001-003,
Opening by Means of Hand Pump			26	001-003,
Closing by Means of Hand Pump			26	001-003,
Opening by Means of Crane			27	001-003,
Closing by Means of Crane			27	001-003,
Opening by Means of Electric Hydraulic Pump			28	ALL
Closing by Means of Electric Hydraulic Pump			28	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Opening by Means of Hand Pump			29	ALL
Closing by Means of Hand Pump			29	ALL
Opening by Means of Crane			30	ALL
Closing by Means of Crane			30	ALL
Special Precautions			301	ALL
Cleaning/Painting			701	ALL
Deactivation/Reactivation			901	ALL
REF : MMEL Sect 1-52, Item 4			901	ALL
FWD, AFT CARGO DOOR LINING AND INSULATION	52-30-13			
Removal/Installation			401	ALL
DOOR SEAL	52-30-18			
Removal/Installation			401	ALL
Approved Repairs			801	ALL
FWD, AFT CARGO DOOR LOCKING MECHANISM	52-30-21			
Removal/Installation			401	ALL
Locking Unit (20) Including Spring Unit (21)			402	ALL
Indicator Flag without Locking Unit			407	ALL
Torque Shaft Assy			407	ALL
Operating Handle			407	ALL
Locking Mechanism of Operating Handle			409	ALL
Switch Actuating Assy			409	ALL
Switch Mechanism			409	ALL
Adjustment/Test			501	ALL
Inspection/Check			601	ALL
FWD, AFT CARGO DOOR LATCH AND STOP FITTINGS	52-30-31			
Removal/Installation			401	ALL
Stop Bolt			402	ALL
Eccentric Bolts, Serrated Plates and Eccentric Bushes			402	ALL
Stop Angle Plates at AFT Cargo Compartment Door			402	ALL
FWD CARGO COMPARTMENT DOOR	52-31-11			
Removal/Installation			401	ALL
Adjustment/Test			501	001-003,
Adjustment/Test			501	ALL
Gaps Door/Fuselage			502	ALL
Inspection/Check			601	001-003,
Inspection/Check			602	ALL
Visual Inspection of Cargo Door Structure			603	ALL
Check of Cargo Door Alignment			607	ALL
Check of Locking Mechanism and Skin Offset			607	ALL
Measurement of Fits and Clearances			607	ALL
AFT CARGO COMPARTMENT DOOR	52-32-11			
Removal/Installation			401	ALL

Printed in France

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Adjustment/Test			501	ALL
Inspection/Check			601	ALL
CAGO COMPARTMENT DOOR	52-33-00			
HYDRAULIC SYSTEM				
Description and Operation			1	ALL
General			1	ALL
Component Location			1	ALL
Description			1	ALL
System Operation			14	ALL
Opening by Means of Electric Pump (Normal Operation)			14	001-003,
Opening by Means of Electric Pump (Normal Operation)			14	ALL
Closing of FWD and AFT Cargo Compartment Doors by Means of Electric Pump (Normal Operation)			15	ALL
Opening by Means of Hand Pump (Manual Operation)			16	001-003,
Closing by Means of Hand Pump (Manual Operation)			16	001-003,
Opening by Means of Hand Pump (Manual Operation)			16	ALL
Closing by Means of Hand Pump (Manual Operation)			17	ALL
Door Actuator Operation			17	ALL
Extension			17	ALL
Retraction			19	ALL
Servicing			301	ALL
Inspection/Check			601	ALL
HAND PUMP (3085)	52-33-11			
Removal/Installation			401	ALL
ELECTRO MECHANICAL SELECTOR VALVE (9MJ - 10MJ)	52-33-12			
Removal/Installation			401	ALL
CHECK VALVE (3389)	52-33-13			
Removal/Installation			401	ALL
CHECK VALVE (3390)	52-33-14			
Removal/Installation			401	ALL
CONTROL VALVE 15MJ, 16MJ	52-33-15			
Removal/Installation			401	ALL
RESTRICTOR VALVE	52-33-17			
Removal/Installation			401	ALL
DOOR ACTUATOR	52-33-18			
Removal/Installation			401	ALL
PRESSURE RELIEF VALVE (3086)	52-33-22			
Removal/Installation			401	ALL
SEQUENCE VALVES (3734) and (3735)	52-33-24			
Removal/Installation			401	ALL

Printed in France

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
BULK CARGO COMPARTMENT DOOR	52-34-00			
Description and Operation			1	ALL
Inspection/Check			601	ALL
Deactivation/Reactivation			901	ALL
BULK CARGO COMPARTMENT DOOR	52-34-11			
Removal/Installation			401	ALL
Adjustment/Test			501	ALL
Adjustment of Stop Fittings			502	ALL
Adjustment of Latch Spigot			502	ALL
Adjustment of Skin Offset and Gaps			505	ALL
Adjustment of Hinge Arms			506	ALL
Adjustment of Locking Mechanism			506	ALL
SUSPENSION	52-34-12			
Removal/Installation			401	ALL
Inspection/Check			601	ALL
SEAL	52-34-18			
Removal/Installation			401	ALL
Approved Repairs			801	ALL
LOCKING MECHANISM	52-34-21			
Removal/Installation			401	ALL
Removal of Spring Rod Cylinder			401	ALL
Removal of Pushrods			402	ALL
Removal of Latch Assembly			402	ALL
Removal of Barrel Locks			406	ALL
Removal of Support Bushes			406	ALL
Installation of Spring Rod Cylinder			409	ALL
Installation of Pushrods			410	ALL
Installation of Latch Assembly			410	ALL
Installation of Barrel Locks			410	ALL
Installation of Support Bushes			411	ALL
Installation of Spring Rod Cylinder			411	001-100,
Installation of Pushrods			412	001-100,
Installation of Latch Assembly			412	001-100,
Installation of Barrel Locks			412	001-100,
Installation of Support Bushes			413	001-100,
Inspection/Check			601	ALL
FITTINGS	52-34-31			
Removal/Installation			401	ALL
Removal of Stop Fittings			402	ALL
Removal of Latch Spigot			402	ALL
Installation of Stop Fittings			405	ALL
Installation of Latch Spigot			405	ALL
Inspection/Check			601	ALL
BALANCE MECHANISM	52-34-41			
Removal/Installation			401	ALL
Inspection/Check			601	ALL
CARGO COMPARTMENT DOORS ELECTRICAL CONTROL SYSTEM	52-35-00			
Description and Operation			1	ALL
General			1	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Component Location			2	ALL
Description			2	ALL
Operation			7	ALL
Adjustment/Test			501	ALL
General			501	ALL
Operational Test			501	ALL
FWD and AFT Cargo Compartment Doors			501	ALL
Functional Test			502	ALL
INDICATOR LIGHT	52-35-12			
Removal/Installation			401	ALL
DOOR CONTROL SWITCH	52-35-13			
Removal/Installation			401	ALL
Adjustment/Test			501	ALL
SERVICE DOORS	52-40-00			
Description and Operation			1	ALL
General			1	ALL
ACCESS DOORS	52-41-00			
Description and Operation			1	ALL
General			1	ALL
Component Location			1	ALL
Glide Antennas Access Door 121AL			3	ALL
Avionics Compt. Access Door 121BL			3	ALL
CLS Control Panel Door 122DR			3	ALL
CLS Control Panel Door 677DR			3	001-005,105-105,
CLS Control Panel Door 677DR			6	ALL
FWD Cargo Compartment Drain System Door 135AL			6	ALL
Air Fan and Air Conditioning Control Valve Access Door 134AR, 136AR			9	ALL
Green Hydraulic System Ground Connector Access Door 147AL			12	001-005,103-103,
Equipment Compartment Access Door 312AR			12	001-005,103-103,
Green Hydraulic System Ground Connector Access Door 147AL			14	006-102,104-200,
Equipment Compartment Access Door 312AR			14	006-102,104-200,
Equipment Compartment Access Door 313AL			14	ALL
APU Access Doors 315AL and 316AR			17	ALL
APU Exhaust Access Fairing 317AL			17	ALL
EQUIPMENT COMPARTMENT ACCESS DOOR	52-41-12			
Removal/Installation			401	ALL
ACCESSORY COMPARTMENT ACCESS DOOR	52-41-13			
Removal/Installation			401	ALL
DOOR - AVIONICS COMPARTMENT ACCESS	52-41-14			
Removal/Installation			401	ALL
Adjustment/Test			501	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
APU EXHAUST ACCESS FAIRING	52-41-18			
Removal/Installation			401	ALL
APU ACCESS DOORS	52-41-21			
Removal/Installation			401	ALL
SERVICE DOORS	52-42-00			
Description and Operation			1	ALL
General			1	ALL
Component Location			1	ALL
FWD Jacking Point Receptacle Door 121CL			1	ALL
Ground Electrical Power Receptacle Door 121EL			1	ALL
FWD Cargo Compartment Door Control Door 122CR			4	ALL
AFT Cargo Compartment Door Control Door 677CR			4	ALL
FWD and AFT Cargo Compartment Access Doors 132AR, 134BR, 152AR, 154AR			4	ALL
LP Ground Air Conditioning Door 135BL			11	001-005,103-103,
Potable Water Service Door 136BR			11	001-005,103-103,
HP Ground Air Conditioning and Air Starting Door 144BR			11	001-005,103-103,
Refuel/Defuel Panel 110VU Door 144DR			16	001-005,103-103,
Fresh Water Drain Door 153AL			16	001-005,103-103,
Toilet Service Panel Door 171BL			16	001-005,103-103,
LP Ground Air Conditioning Door 135BL			17	006-102,104-200,
Potable Water Service Door 136BR			17	006-102,104-200,
Ground Air Conditioning and Air Starting Door 144BR			17	006-102,104-200,
Refuel/Defuel Panel 110VU Door 144DR			18	006-102,104-200,
Fresh Water Drain Door 153AL			18	006-102,104-200,
Toilet Service Panel Door 171BL			18	006-102,104-200,
R Inspection/Check			601	ALL
POTABLE WATER SERVICE DOOR	52-42-13			
Removal/Installation			401	ALL
FWD AND AFT CARGO COMPARTMENT DOOR CONTROL DOORS 122CR (152KR)	52-42-15			
Removal/Installation			401	ALL
REFUEL/DEFUEL PANEL DOOR (144DR)	52-42-17			
Removal/Installation			401	ALL
Deactivation/Reactivation			901	ALL
Ref. : CDL 6.03.28.2			901	ALL
FWD AND AFT CARGO LOADING SYSTEM CONTROL PANEL ACCESS DOORS 122DR, 677DR	52-42-19			
Removal/Installation			401	ALL

	SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
	Inspection/Check			601	001-005,105-105,
	TOILET SERVICE DOOR	52-42-22			
	Removal/Installation			401	ALL
	FIXED INTERIOR DOORS	52-50-00			
	Description and Operation			1	ALL
	General			1	ALL
	FIXED INTERIOR DOORS IN PASSENGER COMPARTMENT	52-51-00			
	Description and Operation			1	ALL
	Adjustment/Test			501	ALL
	Inspection/Check			601	ALL
R	Approved Repairs			801	ALL
R	Repair of the Cockpit Door			801	ALL
R	Repair of the Door Escape Hatch			803	ALL
	Deactivation/Reactivation			901	ALL
	REF: MMEL Sect. 1-52, Item 6-B) Cockpit Door Locking System (CDLS)			901	ALL
	REF: MMEL Sect. 1-52, Item 6-B) - i) - 1) Keypad			902	ALL
	REF: MMEL Sect. 1-52, Item 6-B) - j) Door Release Strike (Catch, Spring, Solenoid, Bolt)			906	ALL
	REF: MMEL Sect. 1-52, Item 6-B) -k)-1) Pressure Rate Sensor			909	ALL
	Ref. MMEL 52-50-02-1) - b) (Lock Function) (FAA only)			910	ALL
	Ref. MMEL 52-50-02-4) (Buzzer) (FAA only)			910	ALL
	Ref. MMEL 52-50-02-5) (Keypad) (FAA only)			910	ALL
	FLIGHT COMPARTMENT DOOR	52-51-11			
	Removal/Installation			401	ALL
	Adjustment/Test			501	ALL
	ELECTRIC RELEASE STRIKE	52-51-12			
	Removal/Installation			401	ALL
	BUZZER - COCKPIT DOOR LOCKING SYSTEM (23MQ)	52-51-13			
	Removal/Installation			401	ALL
	CONTROL UNIT - COCKPIT DOOR LOCKING SYSTEM (24MQ)	52-51-14			
	Removal/Installation			401	ALL
	KEYPAD	52-51-16			
	Removal/Installation			401	ALL
	CIRCUIT BREAKER BOX (60MQ) -	52-51-18			
	Removal/Installation			401	ALL
	LATCH MECHANISM	52-51-21			
	Removal/Installation			401	ALL
	FIXED INTERIOR DOORS IN LOWER FUSELAGE	52-52-00			
	Description and Operation			1	ALL
	General			1	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Component Location			1	ALL
Doors - Avionics Compartment Frame 20 - 131AZ, 132AZ			3	ALL
Door - AFT Cabin Underfloor Compartment 162AZ			3	001-005,101-200,
Door - AFT Cabin Underfloor Compartment 162AZ			6	006-100,
AFT CABIN UNDERFLOOR COMPARTMENT ACCESS DOOR	52-52-15			
Removal/Installation			401	ALL
Inspection/Check			601	ALL
FUSELAGE TAIL SECTION INTERIOR DOORS	52-53-00			
Description and Operation			1	ALL
DOOR WARNING	52-70-00			
Description and Operation			1	ALL
General			1	ALL
Operation			7	ALL
DOOR WARNING	52-71-00			
Description and Operation			1	ALL
General			1	ALL
Component Location			1	ALL
Description			16	101-104,
Description			16	001-100,105-200,
Component Description			17	ALL
Operation			18	ALL
Interfaces			23	ALL
Adjustment/Test			501	ALL
Operational Test			501	ALL
Funtional Test			502	ALL
System Test			509	ALL
DOOR WARNING SWITCHES	52-71-11			
Removal/Installation			401	ALL
FWD Passenger/Crew Doors			402	101-104,
AFT Passenger/Crew Doors			408	101-104,
Emergency Exits			408	101-104,
FWD and AFT Cargo Compartment Doors			408	101-104,
FWD Passenger/Crew Doors			409	001-100,105-200,
AFT Passenger/Crew Doors			409	001-100,105-200,
Emergency Exits			409	001-100,105-200,
FWD and AFT Cargo Compartment Doors			410	001-100,105-200,
BULK Cargo Compartment Door			410	ALL
Avionics Compartment Doors Frame 20 (131AZ, 132AZ)			410	ALL
Avionics Compartment Access Door (121BL)			410	ALL
Lower Access Doors			414	ALL
Adjustment/Test			501	ALL
Adjustment			503	ALL
FWD Passenger/Crew Doors			503	ALL
AFT Passenger/Crew Doors			511	101-104,

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Emergency Exits			512	101-104,
FWD and AFT Cargo Compartment Doors			512	101-104,
AFT Passenger/Crew Doors			512	001-100,105-200,
Emergency Exits			513	001-100,105-200,
FWD and AFT Cargo Compartment Doors			514	001-100,105-200,
BULK Cargo Compartment Door			518	ALL
Avionics Compartment Doors FR20 (131AZ,132AZ)			520	ALL
Avionics Compartment Access Door (121BL)			520	ALL
Lower Access Doors 134AR and 136AR			523	ALL
Test			523	ALL
EMERGENCY ESCAPE SLIDE RELEASE WARNING	52-73-00			
Description and Operation			1	001-003,
General			1	001-003,
Description and Operation			1	ALL
General			1	ALL
Component Location			11	001-003,
Component Location			11	ALL
Description			14	ALL
Component Description			14	001-003,
Component Description			20	001-100,
Component Description			21	101-200,
Component Description			23	101-104,
Component Description			25	001-100,
Component Description			27	105-200,
Operation			28	ALL
Interfaces			57	ALL
Adjustment/Test			501	001-003,
Adjustment/Test			501	ALL
Operational Test			501	ALL
Functional Test of Residual Pressure Warning System			508	ALL
Operational Test of Residual Cabin Pressure Warning System (with Functional Test of the Associated Pressure Switch)			513	ALL
Capacity Test of Autonomous Standby Power Supply Unit (ASPSU) with the Aircraft Systems			517	ALL
R Capacity Test of Autonomous Standby Power Supply Unit (ASPSU) with the Aircraft Systems			518	105-200,
Capacity Test of the Autonomous Standby Power Supply Unit (ASPSU) by Replacing the Batteries			520	ALL
Bite Test of Autonomous Standby Power Supply Unit (ASPSU)			521	ALL

SUBJECT	CH/SE/SU	C	PAGE	EFFECTIVITY
Bite Test of Autonomous Standby Power Supply Unit (ASPSU)			521	105-200,
WARNING LIGHT	52-73-11			
Removal/Installation			401	ALL
WARNING HORN	52-73-12			
Removal/Installation			401	ALL
LIMIT SWITCH	52-73-13			
Removal/Installation			401	ALL
FWD Passenger/Crew Doors			403	ALL
AFT Passenger/Crew Doors			403	ALL
Emergency Exits			407	ALL
Adjustment/Test			501	ALL
Adjustment			502	ALL
Adjustment			502	105-200,
FWD Passenger/Crew Doors			503	ALL
AFT Passenger/Crew Doors			503	ALL
Emergency Exits			508	ALL
TEST SWITCH	52-73-14			
Removal/Installation			401	ALL
RESIDUAL PRESSURE WARNING LIGHT, PASSENGER COMPARTMENT DOORS	52-73-15			
Removal/Installation			401	004-200,
RESIDUAL PRESSURE WARNING LIGHT, CARGO COMPARTMENT DOORS 72WN, 82WN	52-73-16			
Removal/Installation			401	004-200,
CABIN PRESSURE SWITCH (71WN)	52-73-17			
Removal/Installation			401	ALL
POWER SUPPLY UNIT-AUTONOMOUS STANDBY (70WN)	52-73-18			
Removal/Installation			401	ALL
LANDING GEAR DOORS	52-80-00			
Description and Operation			1	ALL
MAIN GEAR DOORS	52-81-00			
Description and Operation			1	ALL
Clearing/Painting			701	ALL
NOSE GEAR DOORS	52-82-00			
Description and Operation			1	ALL

Printed in France

1. General

A. The following tables show the breakdown of that part of chapter 52 relating to the passenger/crew, emergency exit and cargo compartment door.
NOTE : As it is possible for doors to be exchanged between aircraft, the effectivities in the text are given by door serial number.

BREAKDOWN TITLES				
Doors	52-00-00-001 301 601 901			
PASSENGER/ CREW DOORS -	FWD. AFT	FWD		AFT
	52-10-00-001 301 501 701			
	52-10-11-501 601	52-11-11-401		52-13-11-401
SUSPENSION-DOOR	52-10-12-501 601	52-11-12-401		52-13-12-401
LINING AND INSULATION-DOOR-	52-10-13-401 601			
CYLINDER-DOOR DAMPER AND EMERG. OPERATION	52-10-14-301 401 501 601			
NITROGEN BOTTLE-DOOR EMERG. OPERATION	52-10-15-401			
SEAL-DOOR-	52-10-18-401 801			
MECHANISM-DOOR LOCKING-	52-10-20-501 601	52-11-21-401		52-13-21-401
MECHANISM-EMERG. ESCAPE				

BREAKDOWN TITLES				
SLIDE RELEASE	52-10-30-401 501 601			
LATCH AND STOP FITTINGS-DOOR-	52-10-31-401			
PASSENGER COMPT. EMERGENCY EXIT	52-23-00-001 -301 -601			
	52-23-11-401 -501			
LINING AND INSULATION EMERGENCY EXIT	52-23-13-401			
DOOR OPERATION TORSION MECHANISM EMERGENCY EXIT	52-23-14-401 52-23-18-401			
MECHANISM-EMERG. EXIT LOCKING	52-23-21-401 -501 -601			
MECHANISM-EMERG. ESCAPE SLIDE RELEASE	52-23-22-401 -501 -601			
LATCH AND STOP FITTINGS-EMERG. EXIT	52-22-31-401 601			
CARGO COMPT. DOORS-	FWD.AFT	FWD	AFT	BULK
	52-30-00-001 -701			52-34-00-001 -601
CARGO COMPT. DOORS-		52-31-11-401 501	52-32-11-401 501	52-34-11-401 -501

BREAKDOWN TITLES					
		601	601		
LINING AND INSULATION-DOOR-	52-30-13-401				
SEAL-DOOR-	52-30-18-401			52-34-18-401 -601	
MECHANISM-DOOR LOCKING	52-30-21-401 -501 -601			52-34-21-401 -601	
LATCH AND STOP FITTINGS-DOORS	52-30-31-401			52-34-31-401 601	
BALANCE MECHANISM				52-34-41-401 -601	

B. Access to the various compartments of the aircraft can be gained through the appropriate doors. According to their special function the doors are used as entrance and exit for persons or for loading and unloading cargo and baggage; other doors are exclusively used for maintenance purposes.

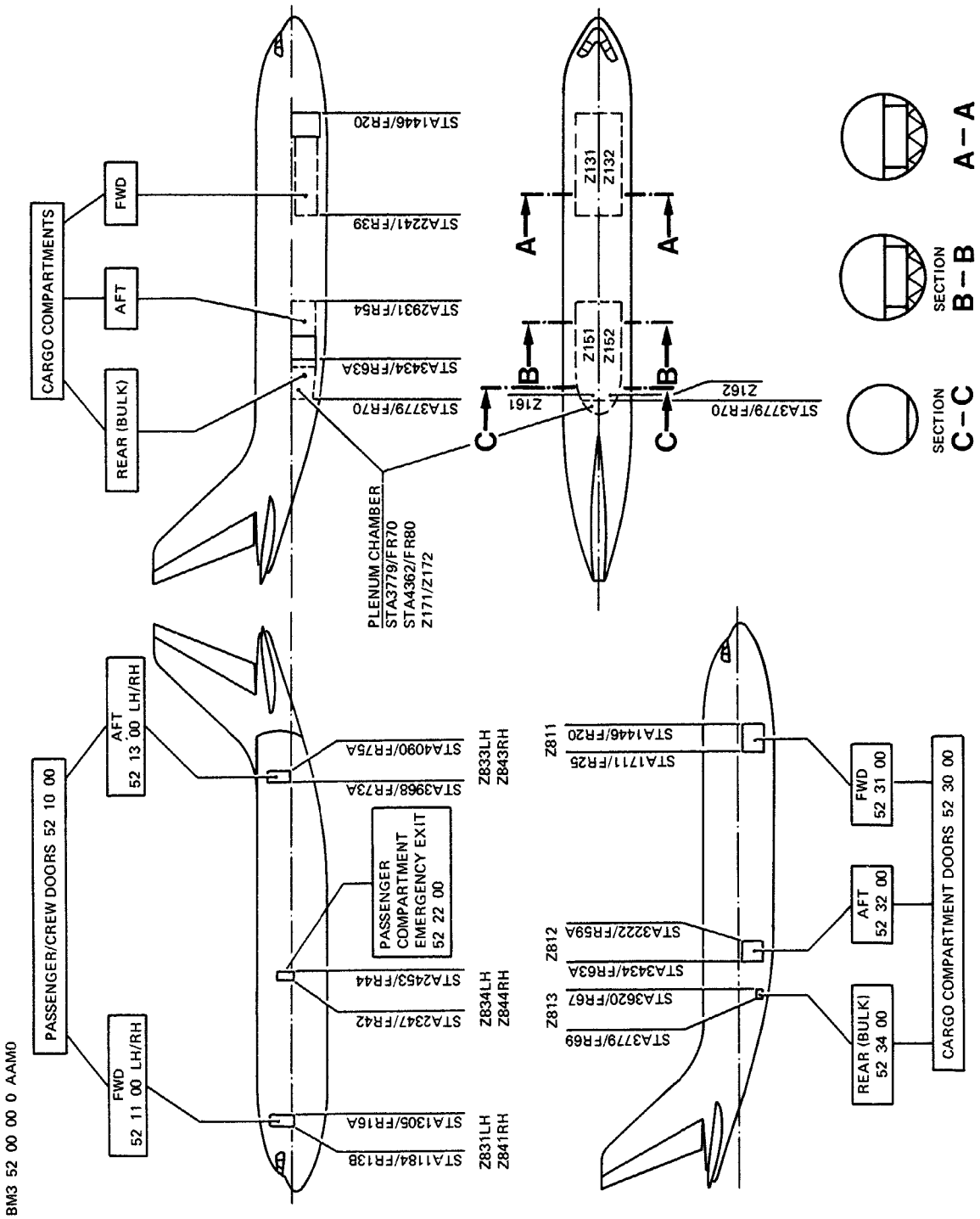
C. Before any door in the pressurized area is to be opened from outside or inside, observe the following instructions:

WARNING : IF THE AIRCRAFT IS SUPPLIED WITH CONDITIONED AIR, MAKE SURE THAT THE FOLLOWING CONDITIONS ARE CARRIED OUT BEFORE YOU OPEN THE DOOR:
- AT LEAST ONE FLT COMPARTMENT WINDOW OR PASSENGER COMPARTMENT DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
- IF THE AIRCRAFT IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR, OR AVIONICS ACCESS DOOR 121BL IS OPEN AND REMAINS OPEN DURING SERVICING.

WARNING : RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

2. Passenger/Crew Doors
(Ref. Fig. 001)
Four passenger/crew doors, two on each side, are provided for passengers and crew. The doors open outwards. They can be operated from inside and outside. Each passenger/crew door is equipped with an emergency escape slide.

3. Passenger Compartment Emergency Exit Doors (Ref. Fig. 001)
In addition to the passenger/crew doors there are two passenger compartment emergency exits in the cabin. These emergency exits are also equipped with



Doors-Passenger/Crew, Emergency Exit and Cargo Compartment Identification Location
Figure 001

emergency escape slides and can be operated from inside and outside.

4. Cargo Compartment Doors (Ref. Fig. 001)
Each of the three cargo compartments is accessible through a cargo door for loading and unloading cargo and baggage. FWD and AFT cargo compartment doors are opened outwards; BULK cargo compartment door is swung inwards. FWD and AFT cargo compartment doors can be operated from outside only. BULK cargo compartment door can be operated from outside and inside.

5. Maintenance and Service Doors
(Ref. Fig. 002)
For maintaining and servicing the various systems, compartments and equipment panels and doors of different sizes are installed. Their application can be derived from their designation.
These doors and panels are as follows:
Doors - APU Access (315AL and 316AR)
Door - Equipment Compartment Access (312AR)
Door - Equipment Compartment Access (313AL)
Door - Avionics Compartment Access (121BL)
Door - Air Fan ! Air Conditioning Control Valve Access (134AR, 136AR)

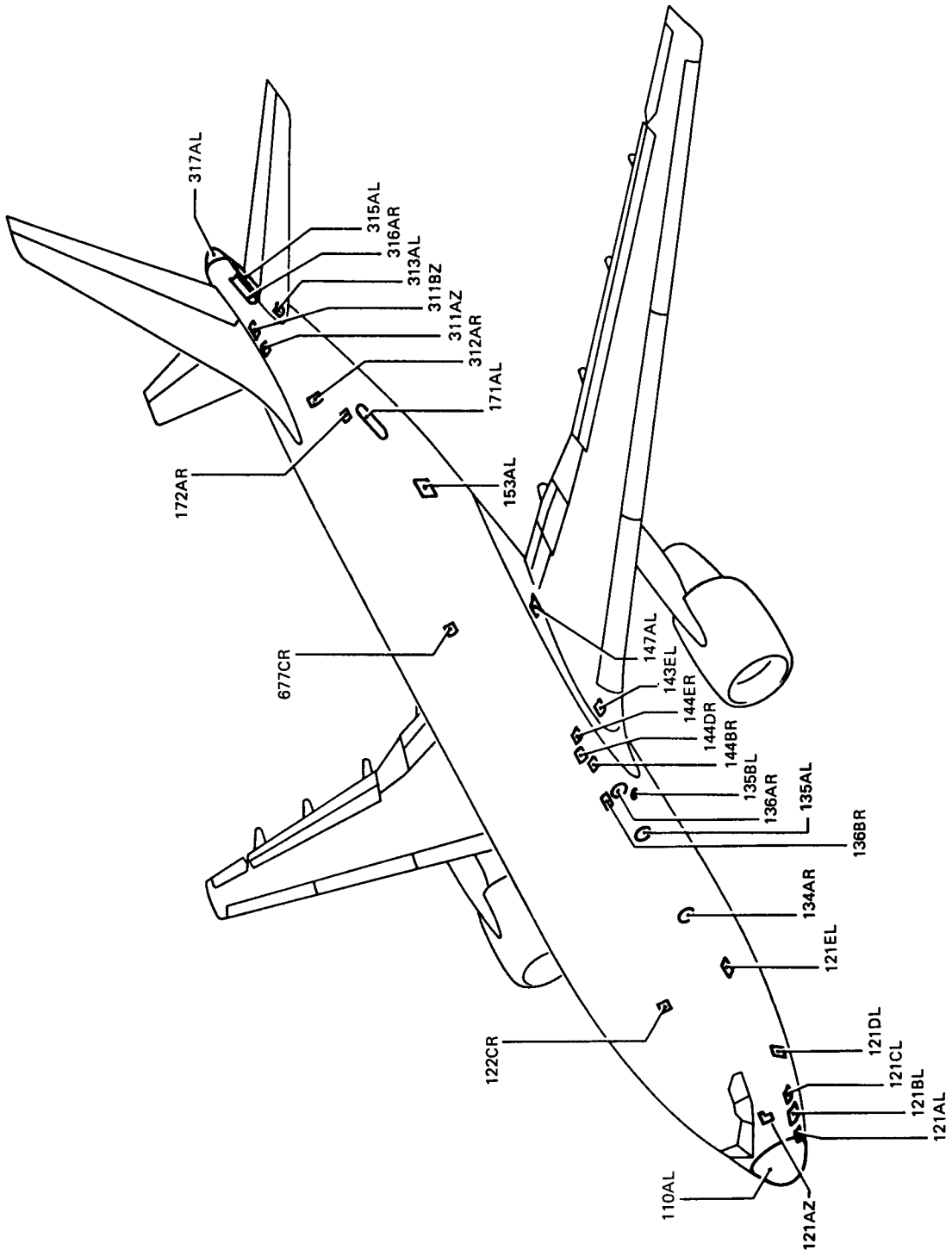
Duct - Tail Cone (317AL)
Door - Drain System - FWD Cargo Compt. (135AL)
Door - Ground Air Conditioning and Air Starting (144BR)
Door - Ground Electrical Power Receptacle (121EL)
Door - Potable Water Service (136BR)
Door - Ground Oxygen Connection (122AZ)
Doors - Cargo Compt. Control Panel Access (122CR, 677CR)
Door - Refuel/Defuel Panel 110VU (144DR)
Doors - FWD Jacking Point Receptacle (121CL)

Doors - Ground Serviced Conditioned Air Connection (135BL)

Door - FWD ! MID ! AFT Lavatory Service (121DL, 136CR, 172AR)
Door - FWD ! AFT Potable Water Drain (136BR, 153AL)
Door - Landing Gear Door Ground Opening (148BR) Control Valve Handle Access
Door - Green Hydraulic System (147AL) Ground Connector Service
Several panels and covers of different sizes distributed over the aircraft for inspection of the structure, etc.

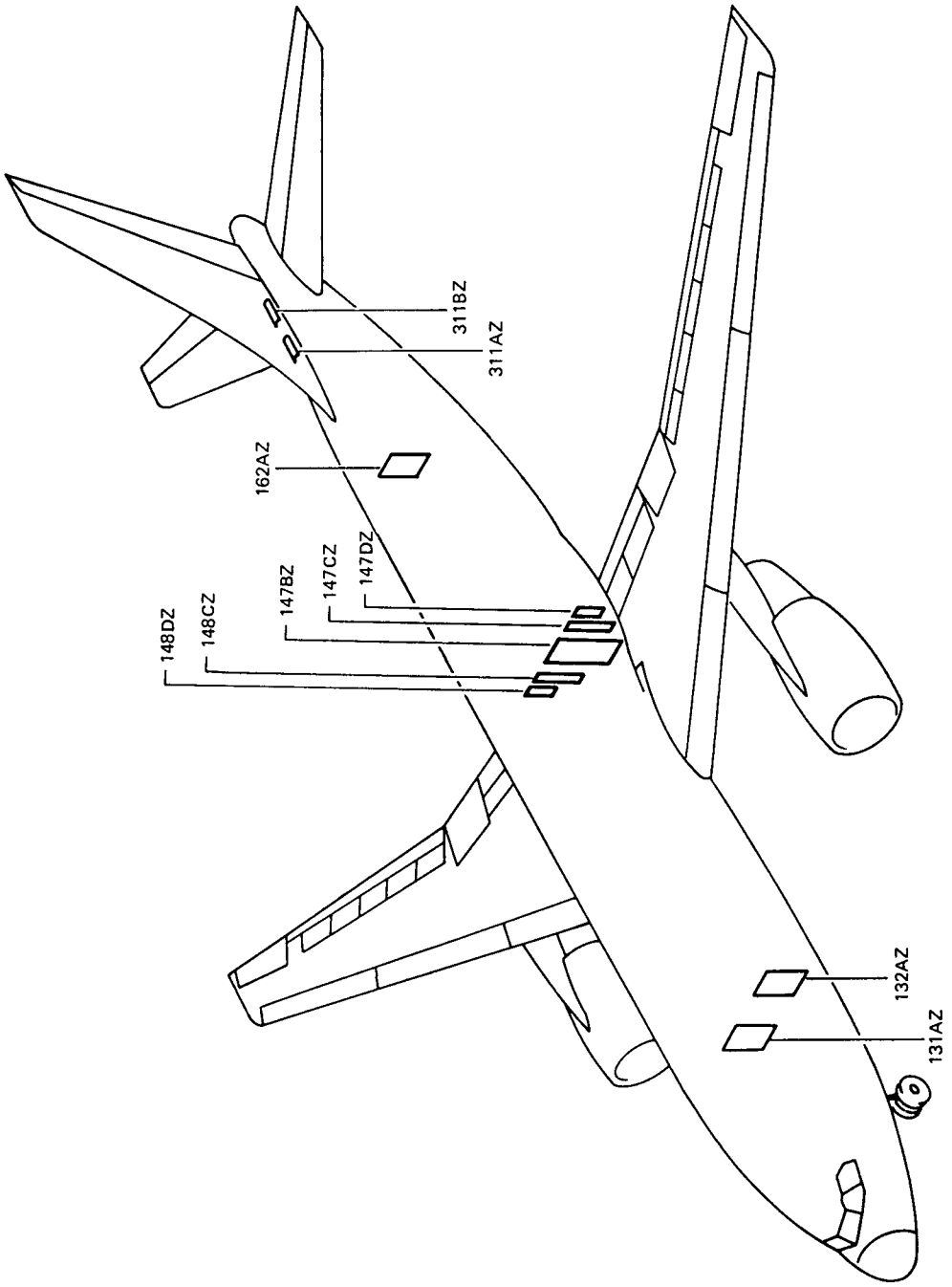
6. Fixed Interior Doors
(Ref. Fig. 003)
The various internal compartments are accessible through the appropriate doors. Their application can be derived from their designation. The following doors belong to this group:
Door - Flight Compartment
Doors - Avionics Compartment Access (131AZ, 132AZ)
Doors - Hydraulic Compartment Access (147DZ, 147CZ, 147BZ, 148CZ, 148DZ)

Door - Aft Cabin Underfloor Compartment (162AZ)



Maintenance and Service Doors
Figure 002

R

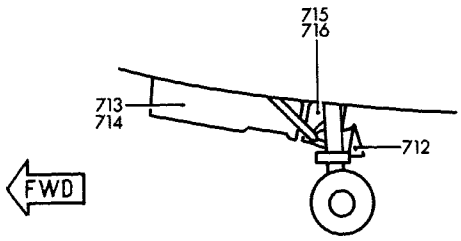


BM6 52 00 00 0 NEM0 01

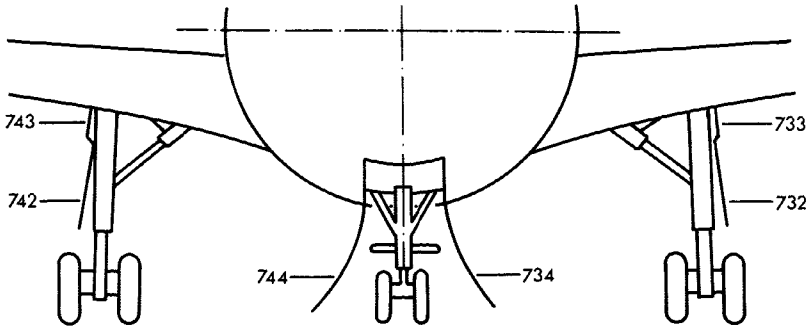
Fixed Interior Doors
Figure 003

R

7. Landing Gear Doors
(Ref. Fig. 004)
With the landing gear retracted in flight the landing gears are covered by doors. These doors close the wheel wells flush with the aircraft skin. The landing gear doors are hydraulically operated with the landing gears. Each main landing gear is covered by doors 734LH, 744RH attached to the fuselage and 733 and 732LH, 743 und 742RH attached to the gear legs. The nose landing gear is covered by doors 713, 714, 715 and 716 attached to the edge of the landing gear bay and an additional panel 712 is attached to the landing gear leg.



NOSE GEAR



MAIN GEAR

MAIN GEAR

BM3 52 00 00 0 AGM0

Landing Gear Doors
Figure 004

1. Doors - Operation Limitations

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301), EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301) OR CARGO DOORS (REF. 52-30-00, P. BLOCK 301).

NOTE : In following limitations, door operation is defined as opening, closing or holding the door in the open position.

A. The FWD and AFT passenger/crew doors and the emergency exits can be operated in normal conditions in wind speeds gusting up to 60 (sixty) knots without structural damage, although extra personnel may be required to operate these doors in high wind speeds.

B. The emergency power system on the FWD and AFT passenger/crew doors is designed to open the doors in wind speeds gusting up to 40 (forty) knots under the most adverse combinations of wind direction and aircraft attitude.
In wind speeds above 40 (forty) knots manual assistance may be required.

R C. The FWD and AFT cargo compartment doors can be opened at wind speeds of
R up to 40 knots and if the nose of the aircraft is put into the wind, the
R maximum wind speed can be 50 knots. The cargo door must be closed before
R the wind speed is more than 60 knots.

D. The bulk cargo compartment door opens inward, therefore there are no operation limitations.

DOORS - INSPECTION/CHECK

1. Reason for the Job

A. Inspection during scheduled maintenance.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Vertically Adjustable Access Platform, max. Height: 5.20 m (17.1 ft.)
B.	Torch
C.	Inspection Mirror

3. Procedure

A. Job Set-Up
(1)Position access platform.

B. Check
(1)Inspect NLG doors structure, attachment fittings and rods for
(a)deformations and loose rivets
(b)cracks
(c)proper attachment and security of installation
(d)corrosion
(e)foreign objects.
(2)Inspect MLG doors structure, attachment fittings and rods for
(a)deformations and loose rivets
(b)cracks
(c)proper attachment and security of installation
(d)corrosion
(e)foreign objects.
(3)Inspect passenger/crew doors for
(a)corrosion and damage to outer skin and edge supports
(b)proper attachment and security of support arms and guide arms at door and fuselage
(c)damage and proper attachment of door lining
(d)satisfactory condition, damage and security of attachments of door seals
(e)proper attachment of all guide and latch fittings to door and fuselage door frame
(f)proper condition of door latches
(g)free movement and guidance
(h)safe locking in closed condition
(i)mechanical and electrical locking indications.
(4)Inspect FWD, AFT and BULK cargo compartment doors for
(a)corrosion, damage and loose rivets of outer skin
(b)proper attachment of access doors in outer skin area
(c)proper condition of locking hooks
(d)satisfactory condition, damage and security of attachments of door

seals
(e)leakage of hydraulic actuators, pipes and valves
(f)safe locking in closed condition
(g)mechanical and electrical locking indications
(h)safe closing of operating handle access doors.
(5)Inspect all access doors and service panels for corrosion, proper locking and guidance, leaks, free movement and security of attachments.

C. Close-Up
(1)Remove access platform.

PASSENGER/CREW DOORS - DESCRIPTION AND OPERATION

1. General

(Ref. Fig. 001)
(Ref. Fig. 002)
(Ref. Fig. 003)

There are two passenger/crew doors installed on both the LH and RH fuselage sides.

FWD passenger/crew doors LH and RH at zones 831 and 841 are located between FR13B and FR16A.

AFT passenger/crew doors LH and RH at zones 833 and 843 are located between FR73A and FR75A.

All of the doors are structurally and mechanically similar and are designed to be used as emergency exits. The opening and closing operations are accomplished by interior and exterior control handles, the doors opening outwards and parallel to the fuselage in the direction of flight.

Each door is comprised of the following major components:

A. Door Structure, Door Seal and Drain Holes

The structure comprises an outer and an inner skin supported by integral stringers, edge and cross members and milled longerons. The door seal, made from a rubber extrusion and installed round the inner edge of the outer skin is pressed into contact with a sealing section of the fuselage door frame and inflated by cabin air pressure to form a pressure tight seal when the door is closed.

Holes are bored in the structure at the lowest collection points of longerons to allow liquids to drain from door interior.

B. Door Suspension

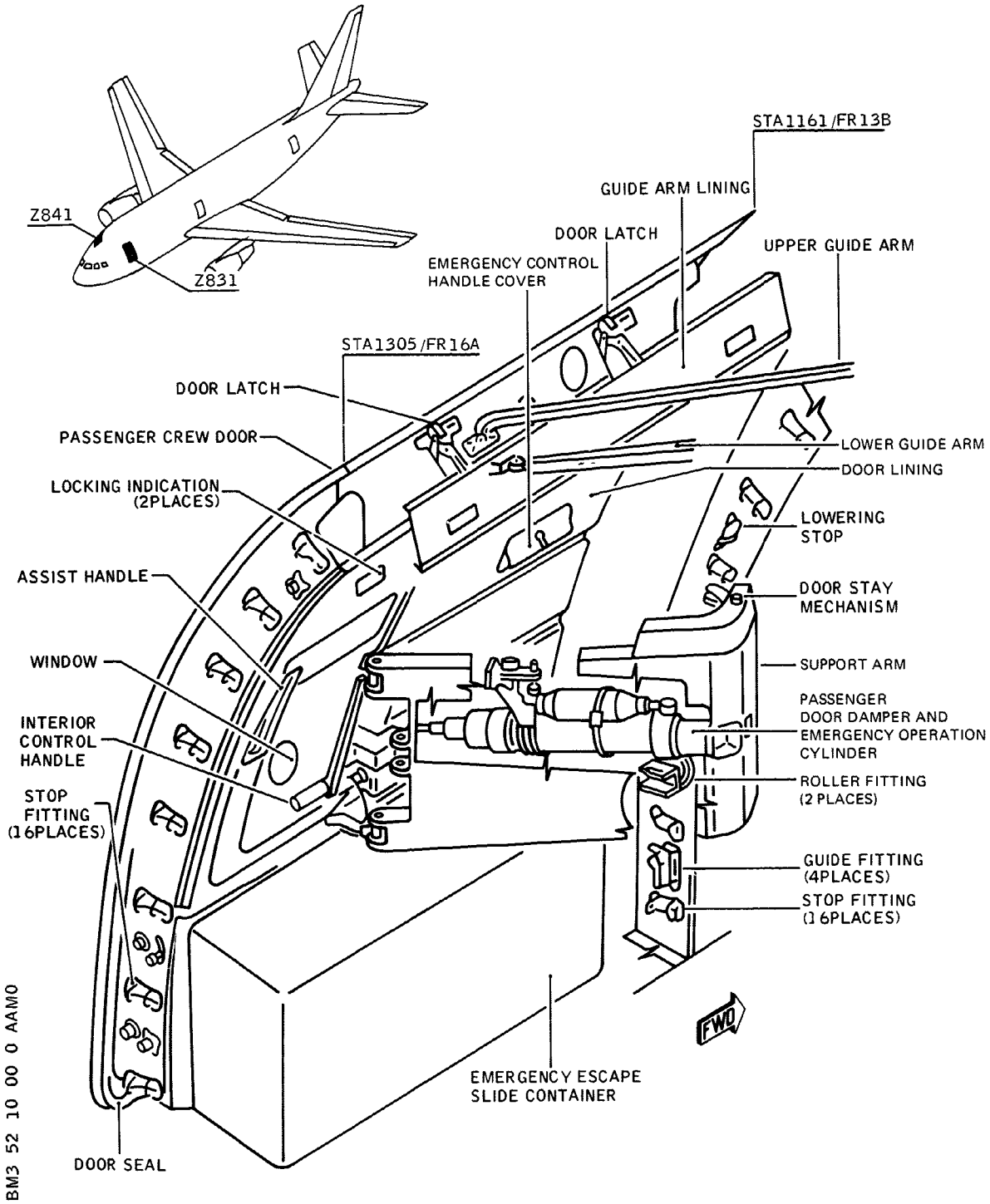
The door suspension comprises a support arm in the form of a light alloy box section, with integral connection forks, attached to the door by connection links, the lower one being also attached to the lifting shaft of the door locking mechanism. A door stay mechanism is installed in the support arm which locks the door in the open position. The upper and lower guide arms attached to the fuselage attachment fittings are movable in two planes and cause the door to remain parallel to the fuselage during opening and closing.

C. Door Lining and Insulation

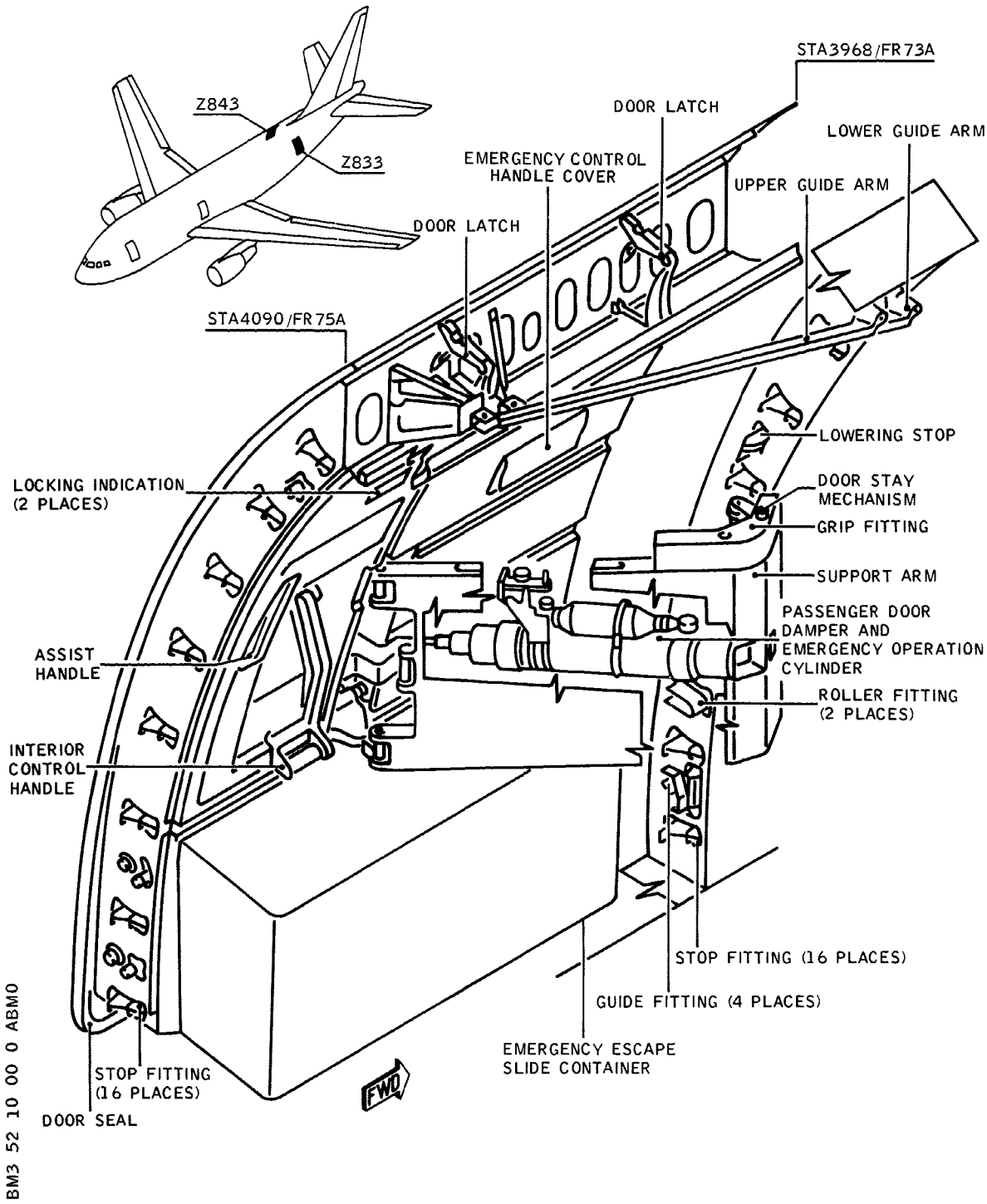
The door lining consists of panels which match the interior decor of the individual aircraft passenger compartment. A sound and heat mat is installed between the door inner skin and lining.

D. Door Damper and Emergency Operation Cylinder

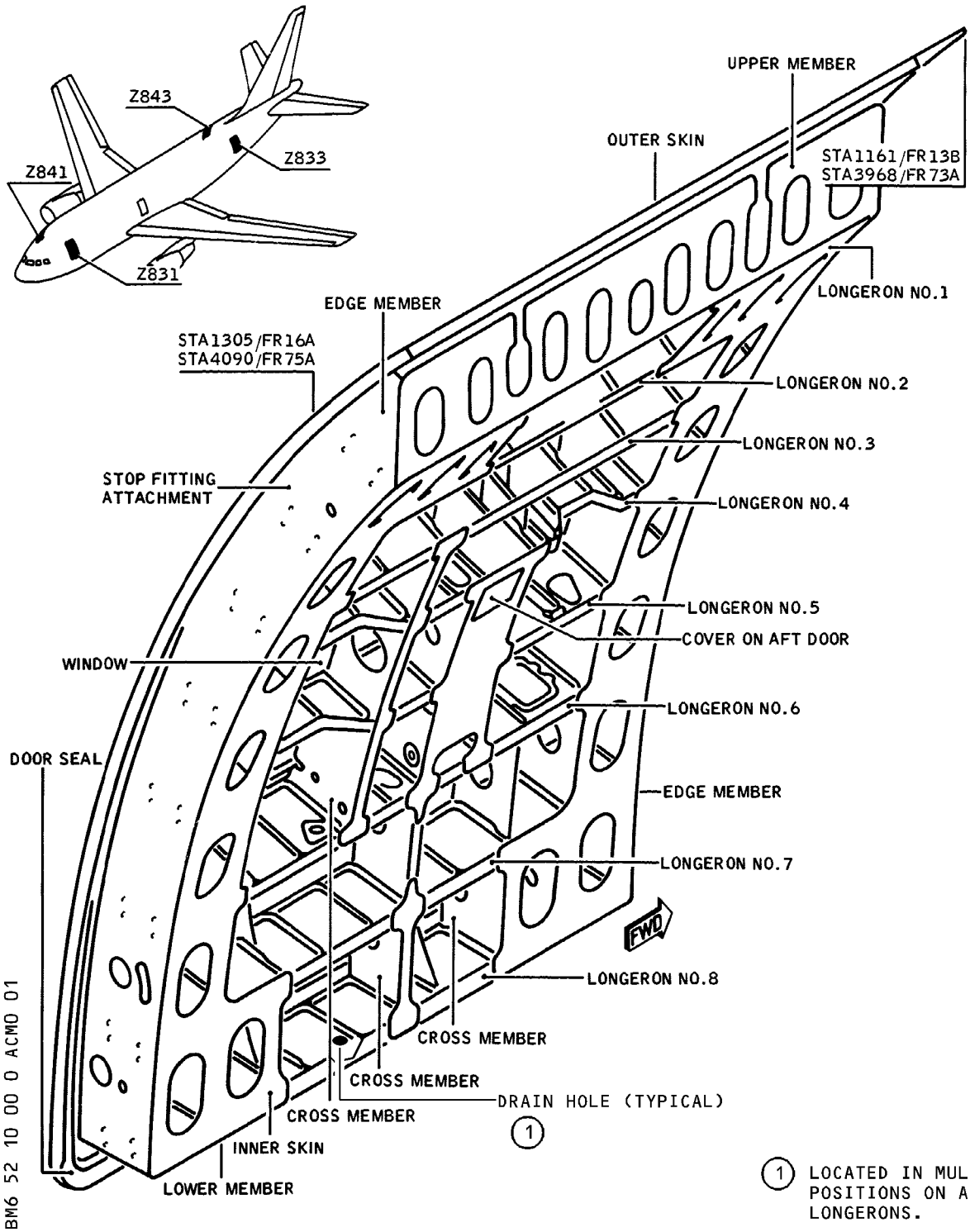
The door damper and emergency operation cylinder is installed on the support arm. It is comprised of a cylinder body, a damping assembly and a gas cylinder and percussion device assembly with a manual safety lock. It limits the speed of the door during normal opening and closing operations and acts as a jack under emergency conditions.



FWD Passenger/Crew Doors - LH, RH
Figure 001



AFT Passenger/Crew Doors - LH, RH
Figure 002



FWD and AFT Passenger/Crew Doors Structure Seal
Figure 003

R

E. Door Locking Mechanism
Two door handles rotating about a horizontal axis are installed for operation of the door locking mechanism, one interior and one exterior. The handle shafts are coupled by a gearbox to permit independent operation. The handles are connected via bellcranks and rods to a lifting shaft, a lowering shaft and a locking shaft.

F. Emergency Escape Slide Release Mechanism
The mechanism consists of a two-position control handle, a composite linkage, bellcranks and linkage guides and is connected to the door structure by bearings and guide fittings. The control handle is located adjacent to the interior door locking handle and can be set for flight in the fully forward position (armed position) or on the ground in the fully aft position (disarmed position). The mechanism can be manually operated only and opening of the door using the exterior locking handle will cause the mechanism to revert to the fully aft position.

G. Latch and Stop Fittings
Both edge members of each door are fitted with eight stop fittings for each of which mating fittings are mounted on the fuselage door frame. A lowering stop is installed on the forward side of the fuselage door frame which contacts the lowering shaft when the door is closed. The shaft rotates to unlock the gearbox and lower the door. Two roller fittings are attached to the fuselage door frame which support the lifting shaft during the lifting movement as the door is being opened. Latch fittings attached to the fuselage door frame are fitted with rollers to receive the door latches. Four fittings with rollers are attached to the door edge members which run in corresponding guide fittings on the fuselage door frame when the door is being closed.

2. Data

A. FWD Passenger/Crew Door
Size : 1.93 m x 1.07 m (76 in. x 42 in.)
Weight without escape slide and door lining : 126 kg (278 lb.)
Weight with escape slide and door lining : 200 kg (442 lb.)
Weight with slide raft and door lining : 240 kg (530 lb.)

B. AFT Passenger/Crew Door
Size : 1.93 m x 1.07 m (76 in. x 42 in.)
Weight without escape slide and door lining : 125 kg (276 lb.)
Weight with escape slide and door lining : 174 kg (384 lb.)
Weight with slide raft and door lining : 199 kg (439 lb.)

CAUTION : THE INTERIOR OR EXTERIOR CONTROL HANDLE MUST BE SET TO THE OPEN POSITION AND THE EMERGENCY CONTROL HANDLE SET TO THE FULLY AFT (DISARMED) POSITION. BEFORE ANY ATTEMPT IS MADE TO CLOSE THE DOOR.

3. Component Location

A. Suspension
(Ref. Fig. 004)
(Ref. Fig. 005)
(Ref. Fig. 006)

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
R		UPPER GUIDE ARM		831/ 841	FWD	52-11-12
R		UPPER GUIDE ARM		833/ 843	AFT	52-13-12
R		LOWER GUIDE ARM		831/ 841	FWD	52-11-12
R		LOWER GUIDE ARM		833/ 843	AFT	52-13-12
R		SUPPORT ARM		831/ 841	FWD	52-11-12
R		SUPPORT ARM		833/ 843	AFT	52-13-12
R		DOOR DAMPER AND EMERGENCY OPERATION CYLINDER		831/ 841	FWD	52-10-14
R		DOOR DAMPER AND EMERGENCY OPERATION CYLINDER		833/ 843	AFT	52-10-14
R		LOWER CONNECTION LINK		831/ 841	FWD	52-11-21
R		LOWER CONNECTION LINK		833/ 843	AFT	52-13-21
R		UPPER CONNECTION LINK		831/ 841	FWD	52-11-21
R		UPPER CONNECTION LINK		833/ 843	AFT	52-13-21

B. Locking Mechanism
(Ref. Fig. 007)
(Ref. Fig. 008)
(Ref. Fig. 009)
(Ref. Fig. 010)
(Ref. Fig. 011)
(Ref. Fig. 012)
(Ref. Fig. 013)
(Ref. Fig. 014)
(Ref. Fig. 015)

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
R		DOOR LATCHES		831/ 841	FWD	52-11-21

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
R		DOOR LATCHES		33/ 843	AFT	52-13-21
R		RODS BETWEEN LATCHES AND BELL-CRANKS		831/ 841	FWD	52-11-21
R		RODS BETWEEN LATCHES AND BELL-CRANKS		833/ 843	AFT	52-13-21
R		BELLCRANK ON LOCKING SHAFT		831/ 841	FWD	52-11-21
R		BELLCRANK ON LOCKING SHAFT		833/ 843	AFT	52-13-21
R		LOCKING SHAFT		831/ 841	FWD	52-11-21
R		LOCKING SHAFT		833/ 843	AFT	52-13-21
R		ROD BETWEEN LOCKING SHAFT AND GEARBOX		831/ 841	FWD	52-11-21
R		ROD BETWEEN LOCKING SHAFT AND GEARBOX		833/ 843	AFT	52-13-21
R		LOWERING SHAFT		831/ 841	FWD	52-11-21
R		LOWERING SHAFT		833/ 843	AFT	52-13-21
R		ROD BETWEEN LOWERING SHAFT AND GEARBOX		831/ 841	FWD	52-11-21
R		ROD BETWEEN LOWERING SHAFT AND GEARBOX		833/ 843	AFT	52-13-21
R		SPRING ROD CYLINDER		831/ 841	FWD	52-11-21
R		SPRING ROD CYLINDER		833/ 843	AFT	52-13-21
R		LOCKING INDICATOR		831/ 841	FWD	52-11-21
R		LOCKING INDICATOR		833/ 843	AFT	52-13-21
R		GEARBOX		831/ 841	FWD	52-11-21
R		GEARBOX		833/ 843	AFT	52-13-21
R		INTERIOR CONTROL HANDLE		831/ 841	FWD	52-11-21
R		INTERIOR CONTROL HANDLE		833/ 843	AFT	52-13-21
R		EXTERIOR CONTROL HANDLE		831/ 841	FWD	52-11-21
R		EXTERIOR CONTROL HANDLE		833/ 843	AFT	52-13-21
R		LOCKING HOOK		831/ 841	FWD	52-11-21

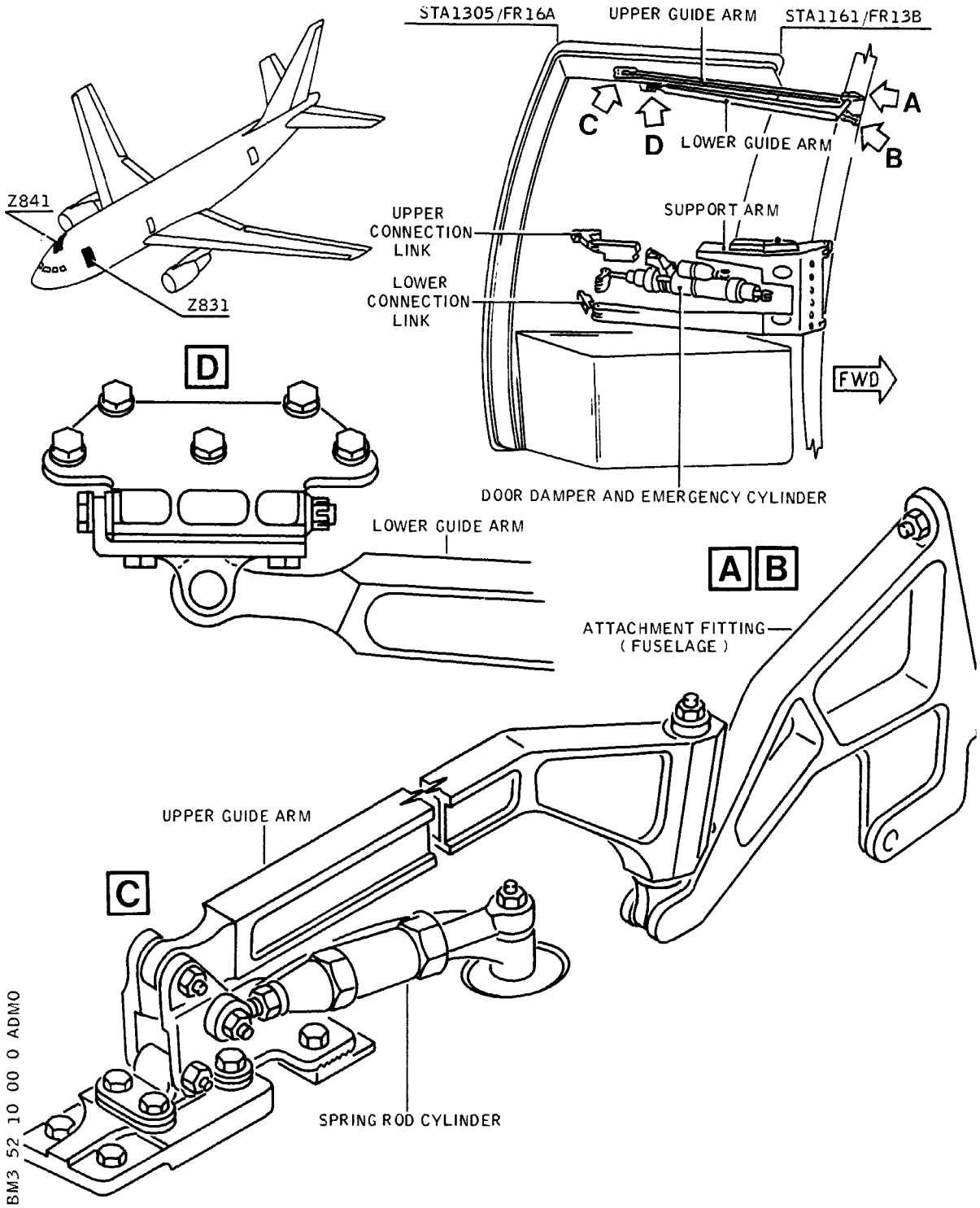
	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
R		LOCKING HOOK		833/ 843	AFT	52-13-21
R		TWIN LEVER		831/ 841	FWD	52-11-21
R		TWIN LEVER		833/ 843	AFT	52-13-21
R		ROD BETWEEN GEARBOX AND TWIN LEVER		831/ 841	FWD	52-11-21
R		ROD BETWEEN GEARBOX AND TWIN LEVER		833/ 843	AFT	52-13-21
R		ROD BETWEEN LOWER CONNECTION LINK AND LIFTING SHAFT		831/ 841	FWD	52-11-21
R		ROD BETWEEN LOWER CONNECTION LINK AND LIFTING SHAFT		833/ 843	AFT	52-13-21
R		LIFTING SHAFT		831/ 841	FWD	52-11-21
R		LIFTING SHAFT		833/ 843	AFT	52-13-21
R		ROD BETWEEN LIFTING SHAFT AND TORQUE SHAFT		831/ 841	FWD	52-11-21
R		ROD BETWEEN LIFTING SHAFT AND TORQUE SHAFT		833/ 843	AFT	52-13-21
R		TORQUE SHAFT		831/ 841	FWD	52-11-21
R		TORQUE SHAFT		833/ 843	AFT	52-13-21
R		TORSION BAR SPRING		831/ 843	FWD	52-11-21
R		TORSION BAR SPRING		833/ 843	AFT	52-13-21

C. Emergency Escape Slide Release Mechanism
(Ref. Fig. 016)
(Ref. Fig. 017)
(Ref. Fig. 018)
(Ref. Fig. 019)

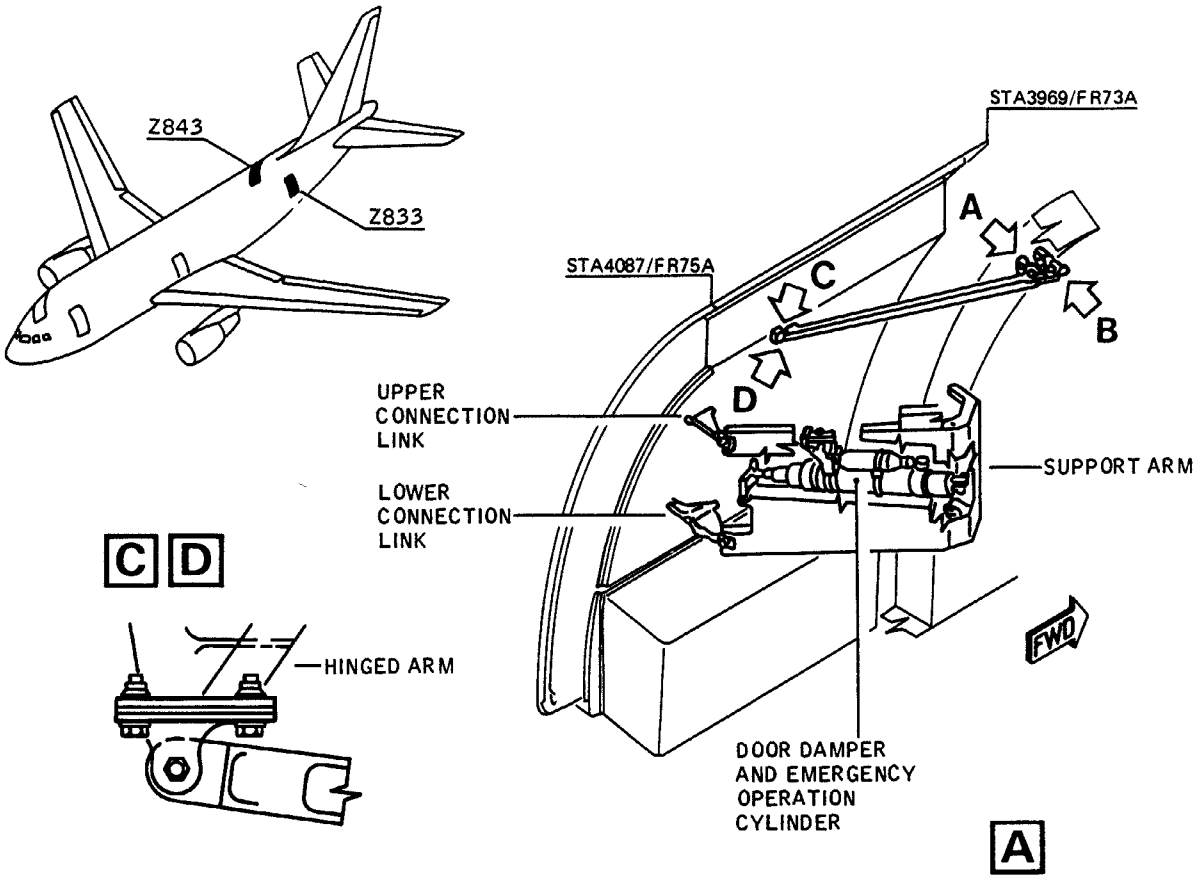
	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
R		EMERGENCY CONTROL HANDLE		831/ 841	AFT	52-10-30
R		EMERGENCY CONTROL HANDLE		833/ 843	FWD	52-10-30
R		CAM		831/ 841	FWD	52-10-30
R		CAM		833/ 843	AFT	52-10-30

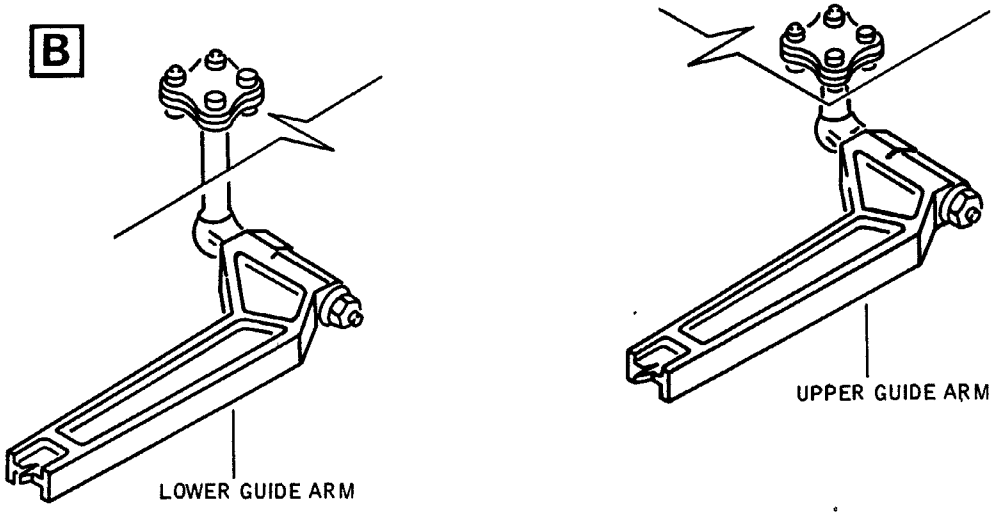
	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
R		CAM DISK		831/ 841	FWD	52-10-30
R		CAM DISK		833/ 843	AFT	52-10-30
R		ECCENTRIC LEVER		831/ 841	FWD	52-10-30
R		ECCENTRIC LEVER		833/ 843	AFT	52-10-30
R		JAW		831/ 841	FWD	52-10-30
R		JAW		833/ 843	AFT	52-10-30
R		ROD BETWEEN HANDLE AND BELLCRANK UNIT		831/ 841	FWD	52-10-30
R		ROD BETWEEN HANDLE AND BELLCRANK UNIT		833/ 843	AFT	52-10-30
R		BELLCRANK UNIT		831/ 841	FWD	52-10-30
R		BELLCRANK UNIT		833/ 843	AFT	52-10-30
R		STOP LEVER		831/ 841	FWD	52-10-30
R		STOP LEVER		833/ 843	AFT	52-10-30
R		ROD BETWEEN BELLCRANK AND LOCKING ASSEMBLY		831/ 841	FWD	52-10-30
R		ROD BETWEEN BELLCRANK AND LOCKING ASSEMBLY		833/ 843	AFT	52-10-30
R		LOCKING ASSEMBLY		831/ 841	FWD	52-10-30
R		LOCKING ASSEMBLY		833/ 843	AFT	52-10-30
R		GUIDE STRUT		831/ 841	FWD	52-10-30
R		GUIDE STRUT		833/ 843	AFT	52-10-30
R		ROD BETWEEN LOCKING ASSEMBLY AND BELLCRANK		831/ 841	FWD	52-10-30
R		ROD BETWEEN LOCKING ASSEMBLY AND BELLCRANK		833/ 843	AFT	52-10-30
R		BELLCRANK		831/ 841	FWD	52-10-30
R		BELLCRANK		833/ 843	AFT	52-10-30
R		LINKAGE GUIDE		831/ 841	FWD	52-10-30
R		LINKAGE GUIDE		833/ 843	AFT	52-10-30

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
R		SLIDES		831/ 841	FWD	52-10-30
R		SLIDES		833/ 843	AFT	52-10-30
R		GIRT BAR		831/ 841	FWD	52-10-30
R		GIRT BAR		833/ 843	AFT	52-10-30
R		ROD BETWEEN LINKAGE GUIDE AND BELLCRANK		831/ 841	FWD	52-10-30
R		ROD BETWEEN LINKAGE GUIDE AND BELLCRANK		833/ 843	AFT	52-10-30
R		ROD BETWEEN LINKAGE GUIDE AND BELLCRANK		831/ 841	FWD	52-10-30
R		ROD BETWEEN LINKAGE GUIDE AND BELLCRANK		833/ 843	AFT	52-10-30
R		BELLCRANK		831/ 841	FWD	52-10-30
R		BELLCRANK		833/ 843	AFT	52-10-30



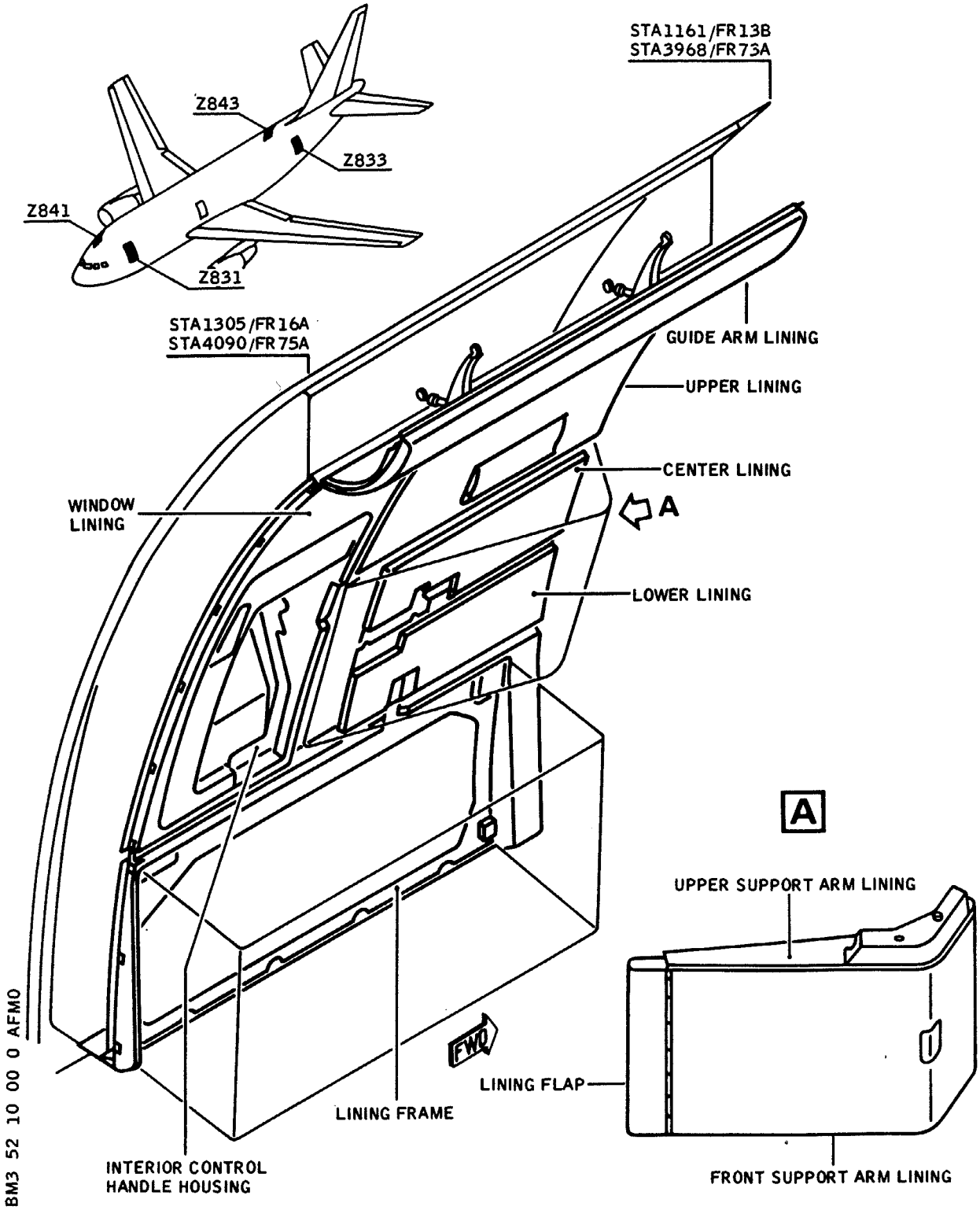
FWD Passenger/Crew Doors Suspension
Figure 004



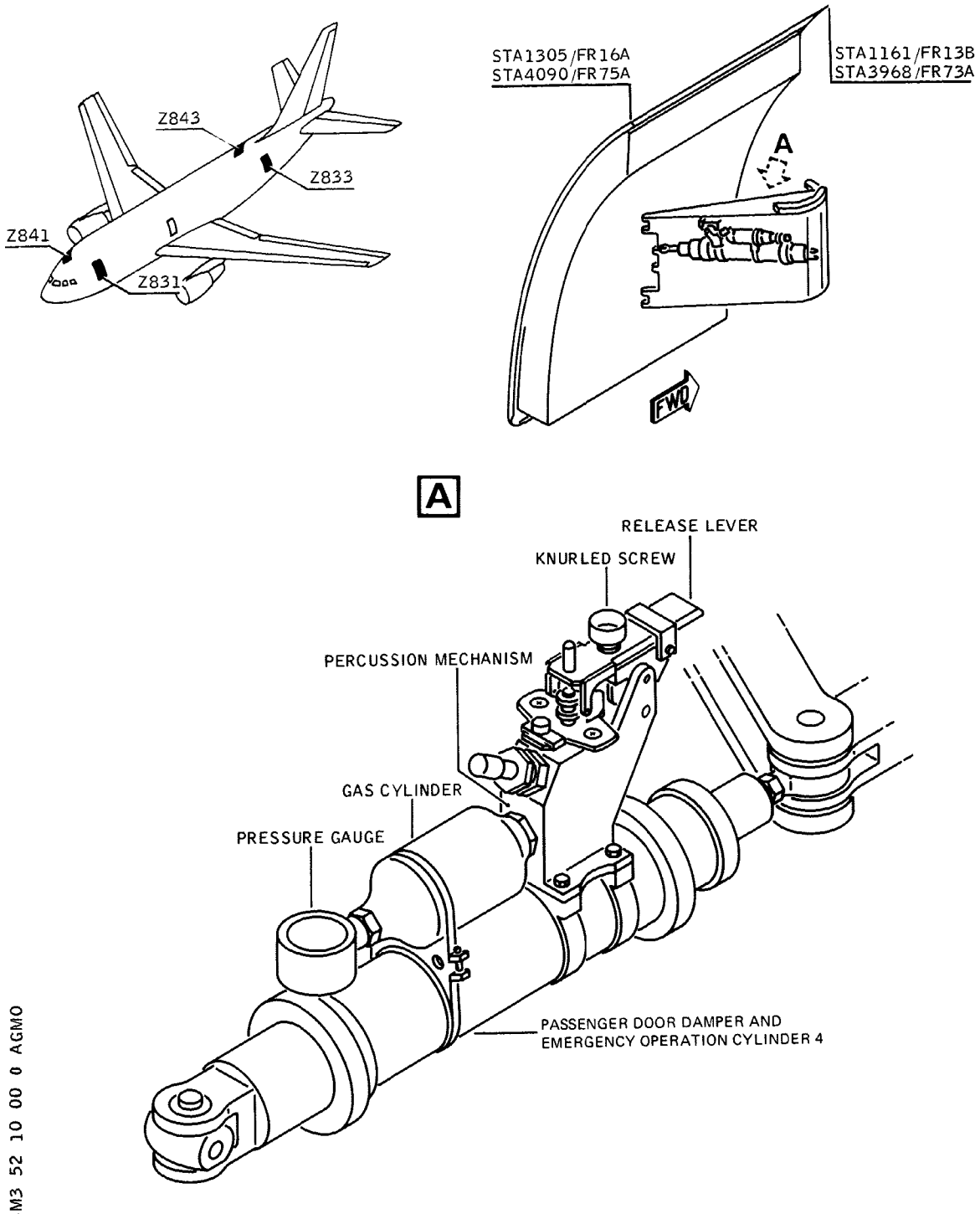


BM3 52 10 00 0 AEMO

AFT Passenger/Crew Doors Suspension
Figure 005

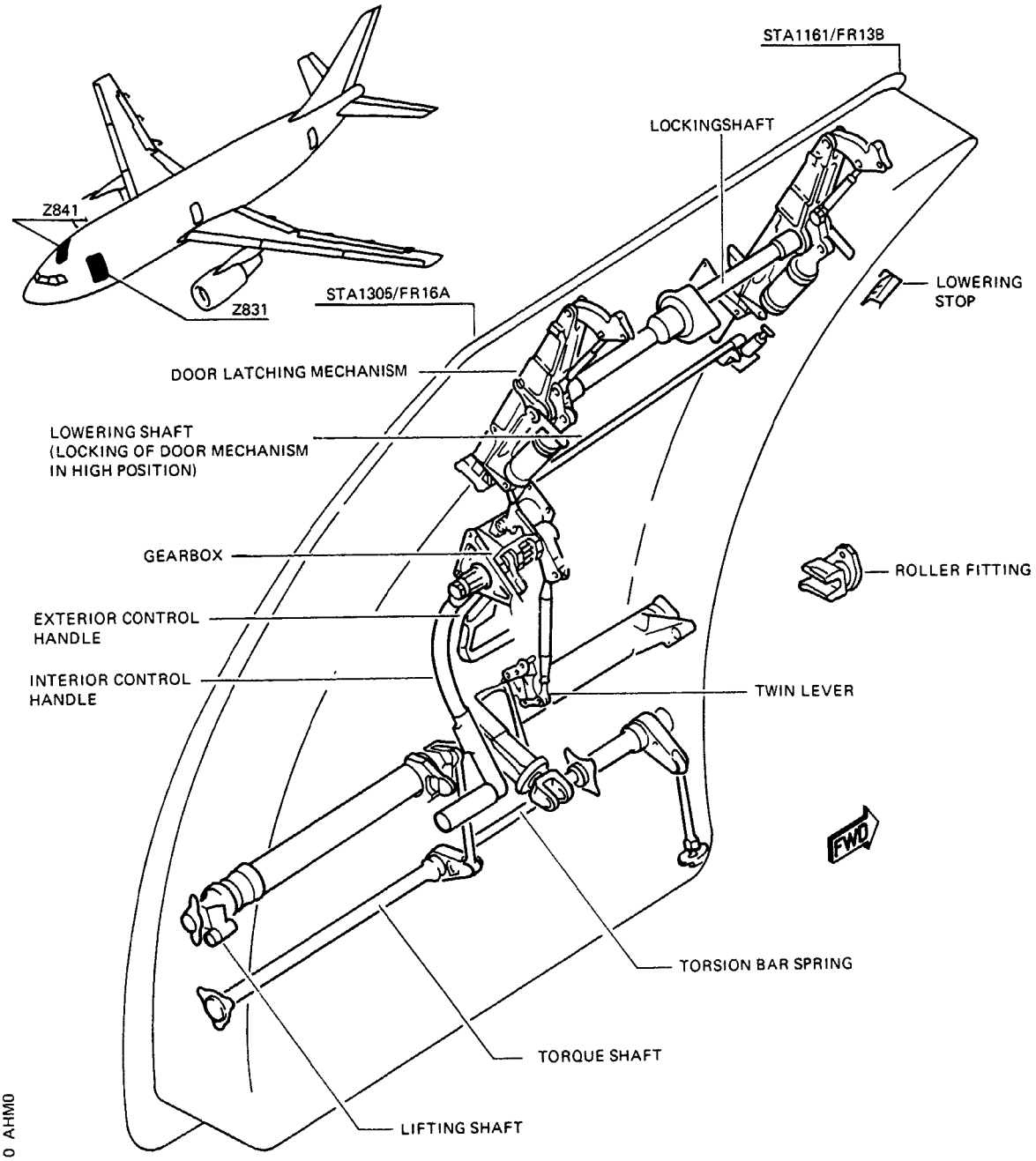


FWD and AFT Passenger/Crew Doors -
Door Lining (TYPICAL)
Figure 006



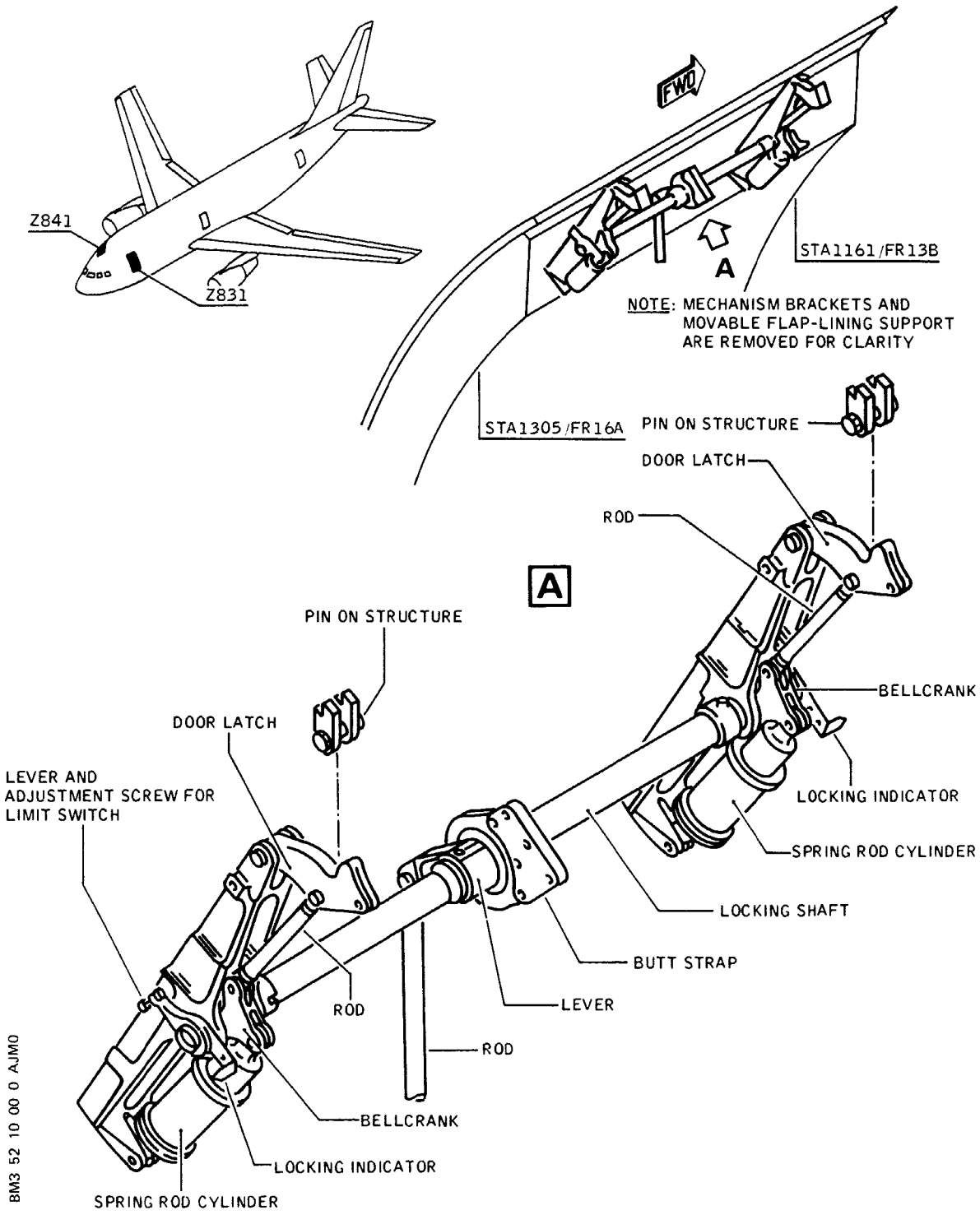
BM3 52 10 00 0 AGMO

Door Damper and Emergency Operation Cylinder
Figure 007

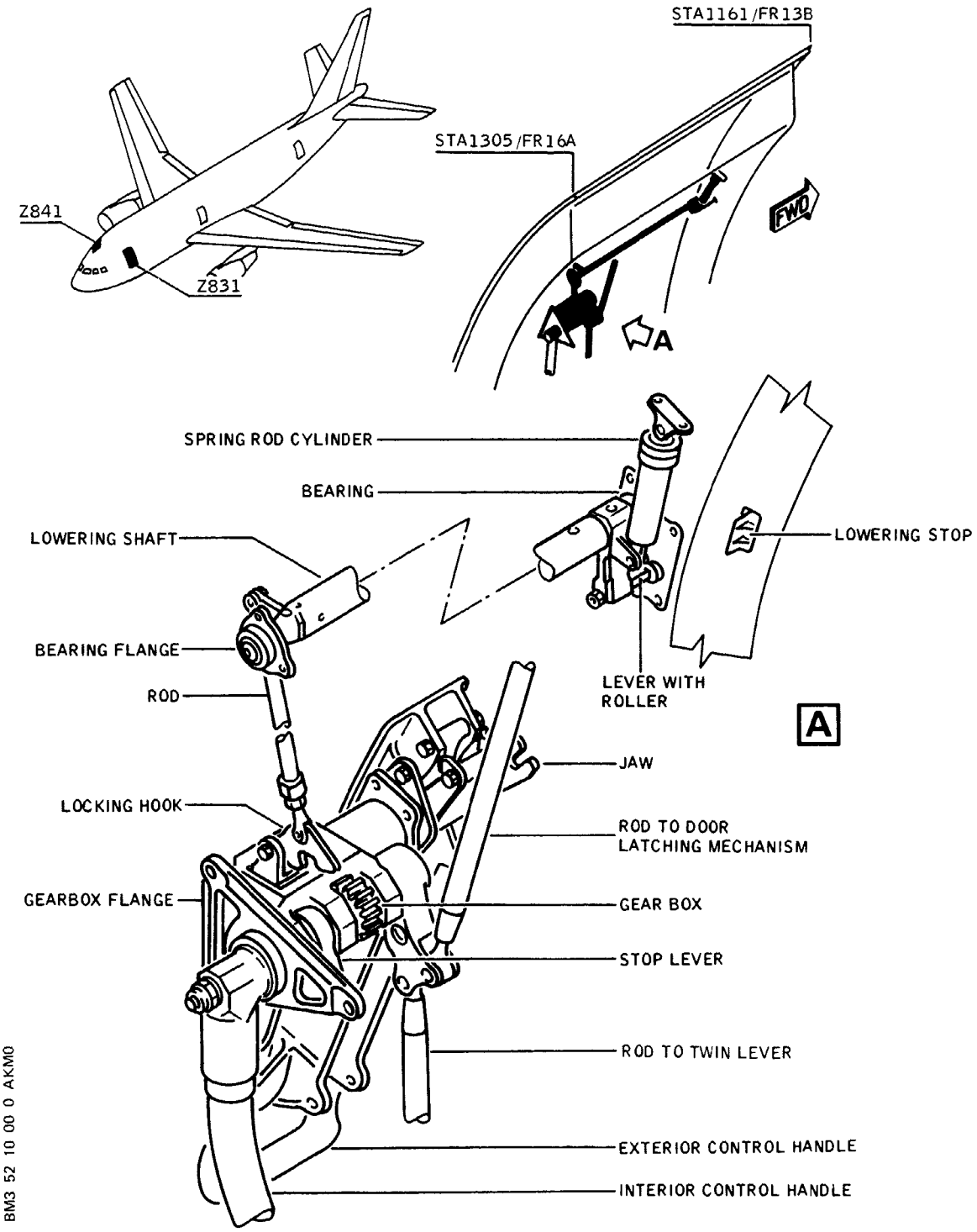


BM3 52 10 00 0 AHM0

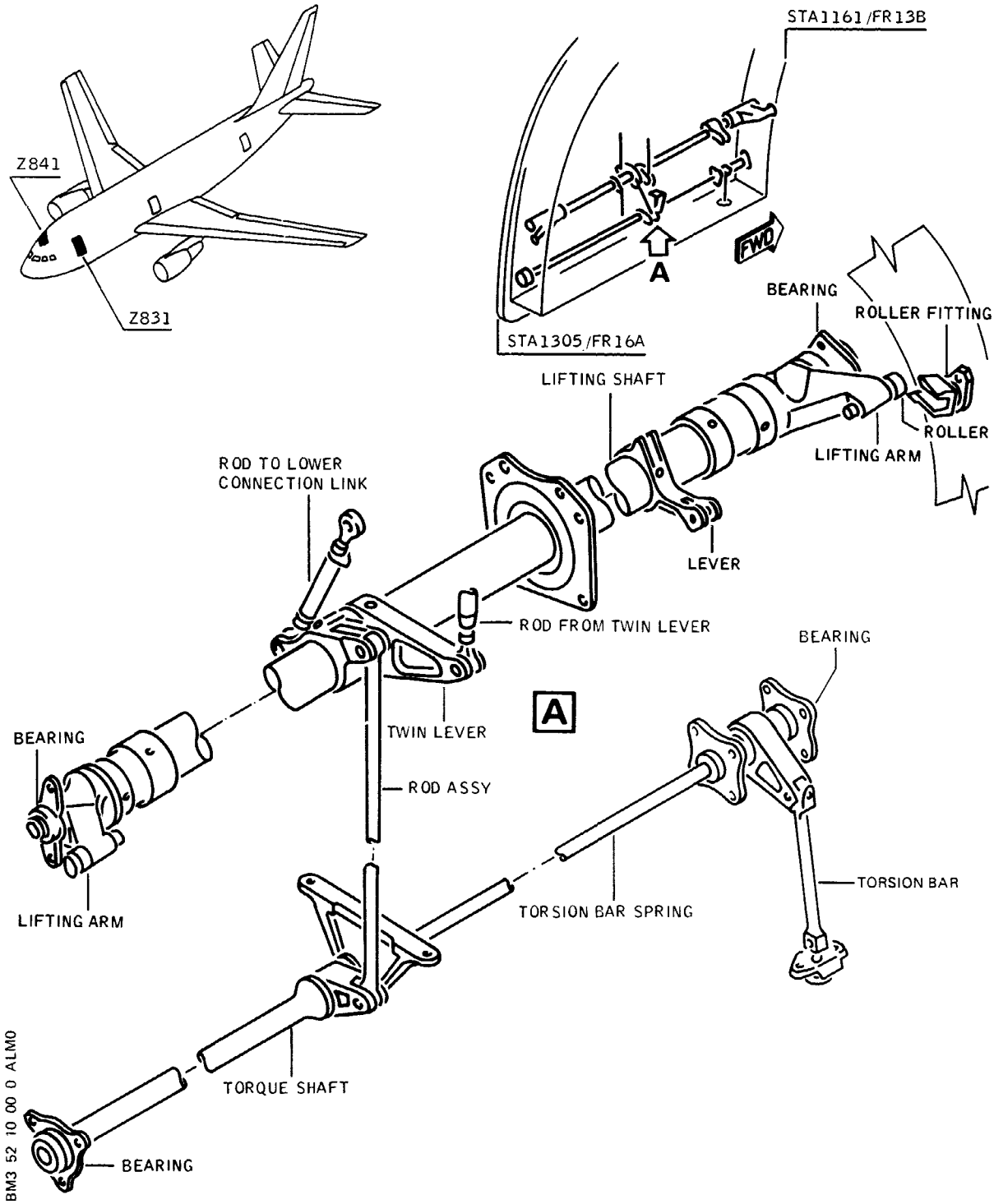
FWD Passenger/Crew Doors - Door Locking Mechanism (TYPICAL)
Figure 008



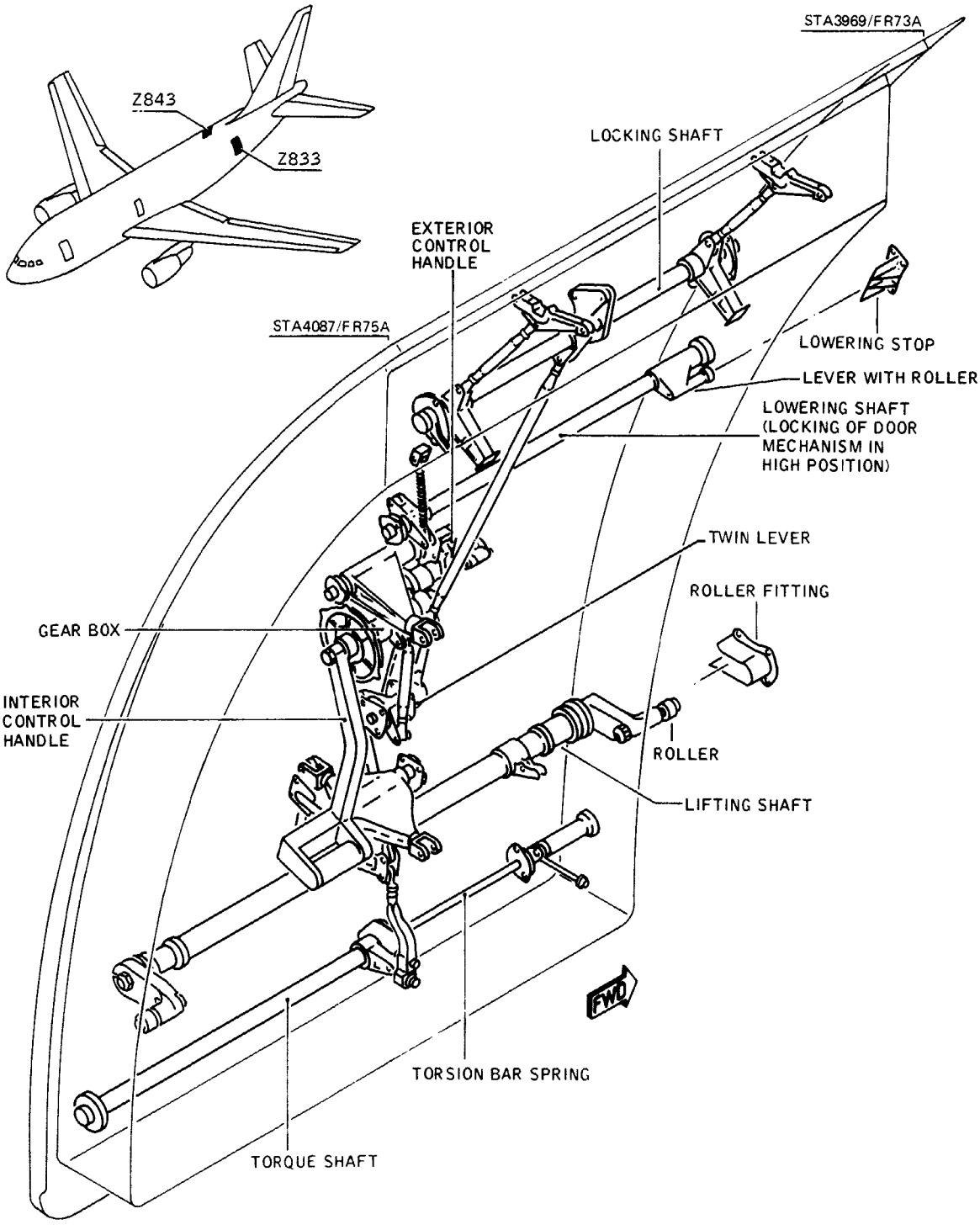
FWD Passenger/Crew Doors - Door Latches, Locking Shaft
Figure 009



FWD Passenger/Crew Doors - Gear Box, Lowering Shaft
Figure 010



FWD Passenger/Crew Doors - Lifting Shaft,
Torsion Bar Spring
Figure 011

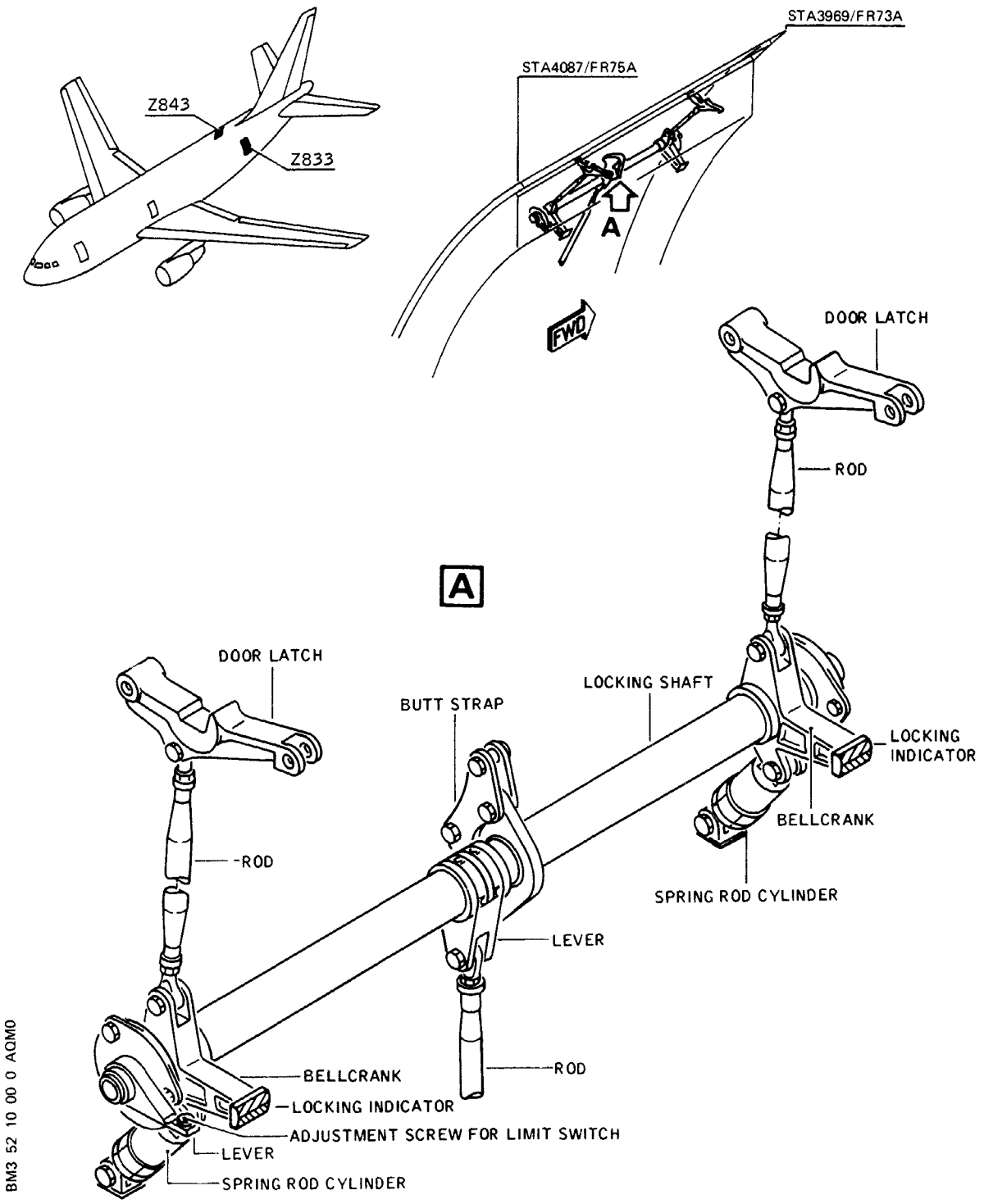


AFT Passenger/Crew Doors-Door
Locking Mechanism (TYPICAL)
Figure 012

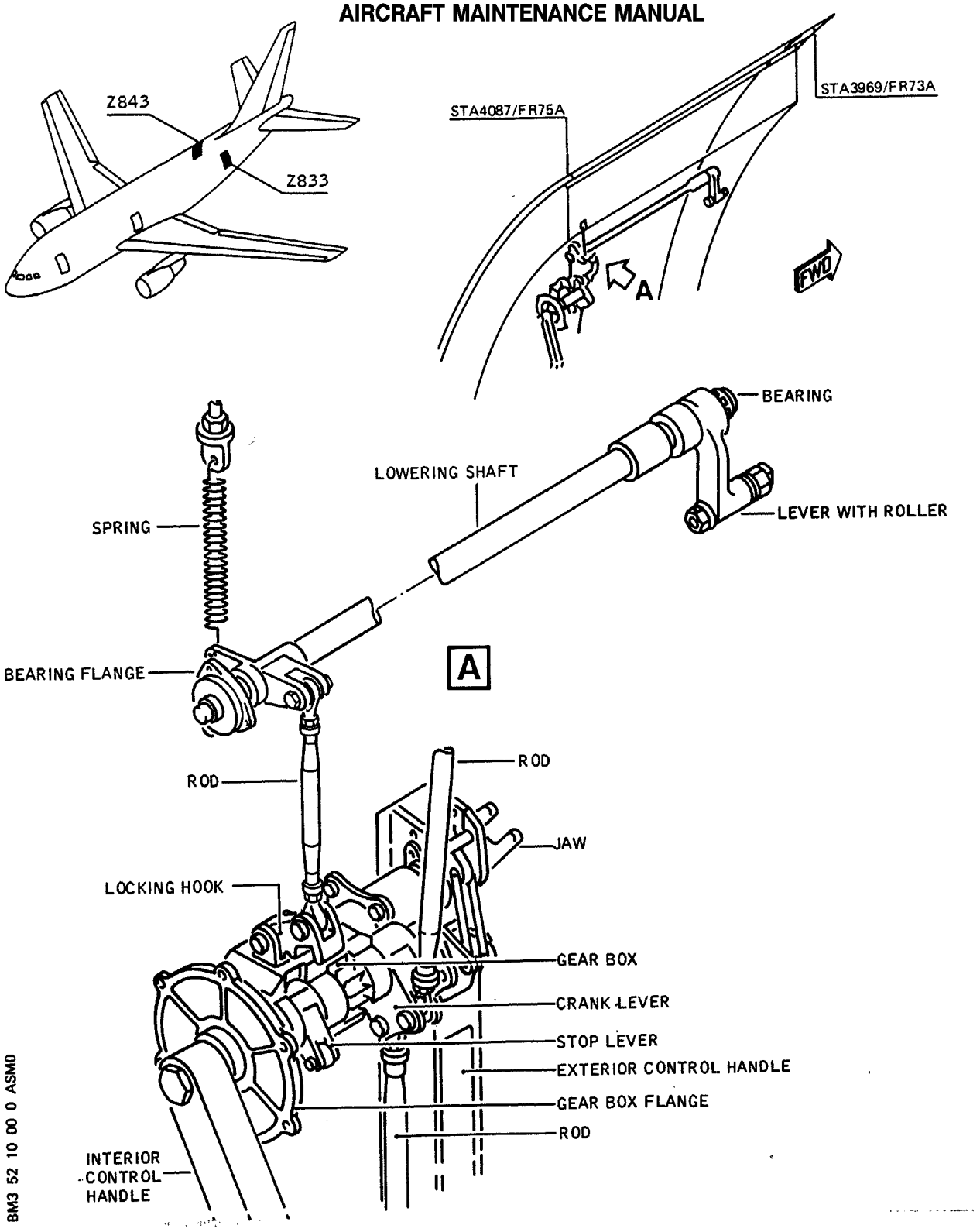
EFFECTIVITY: ALL

PIA

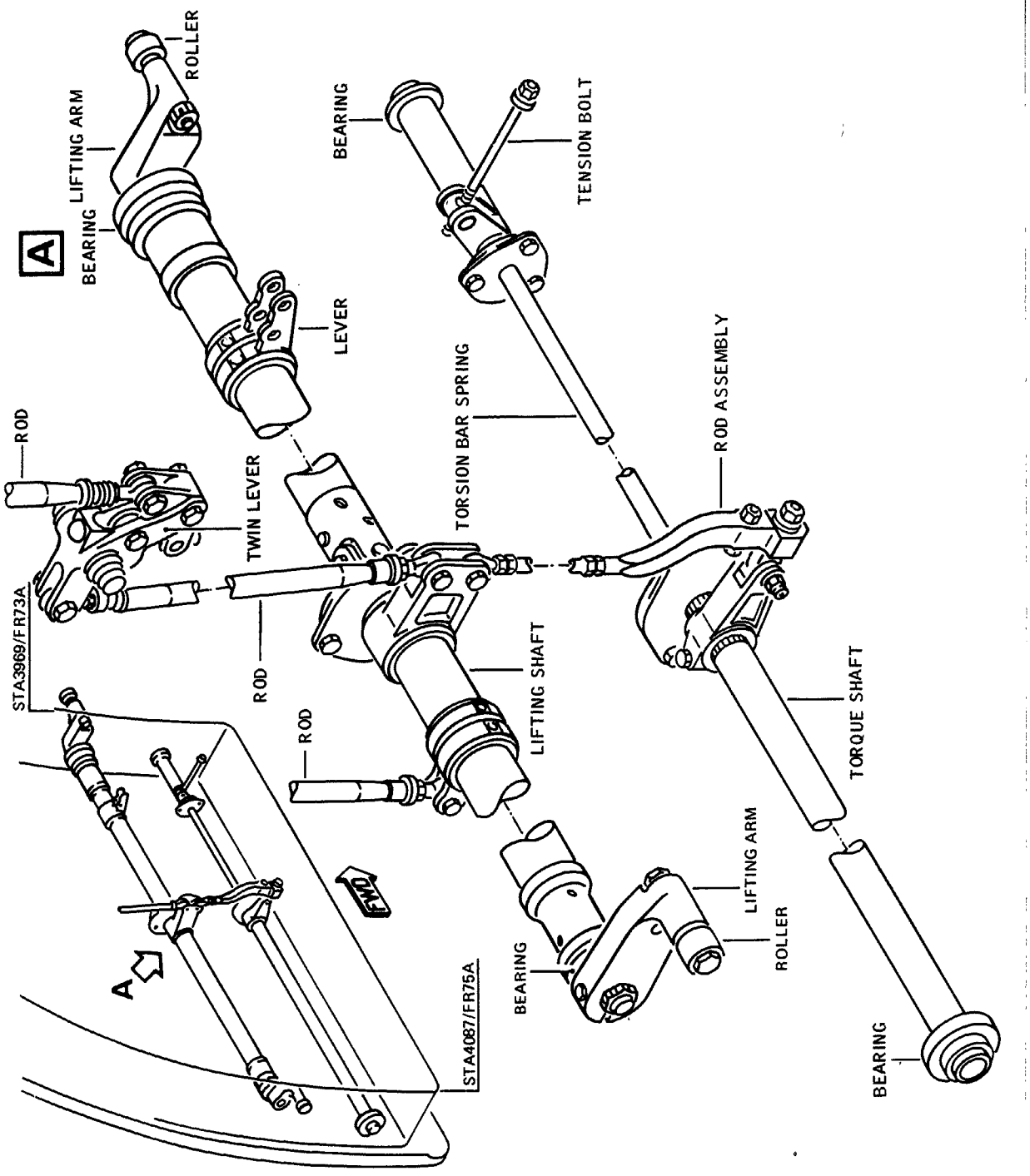
Printed in France



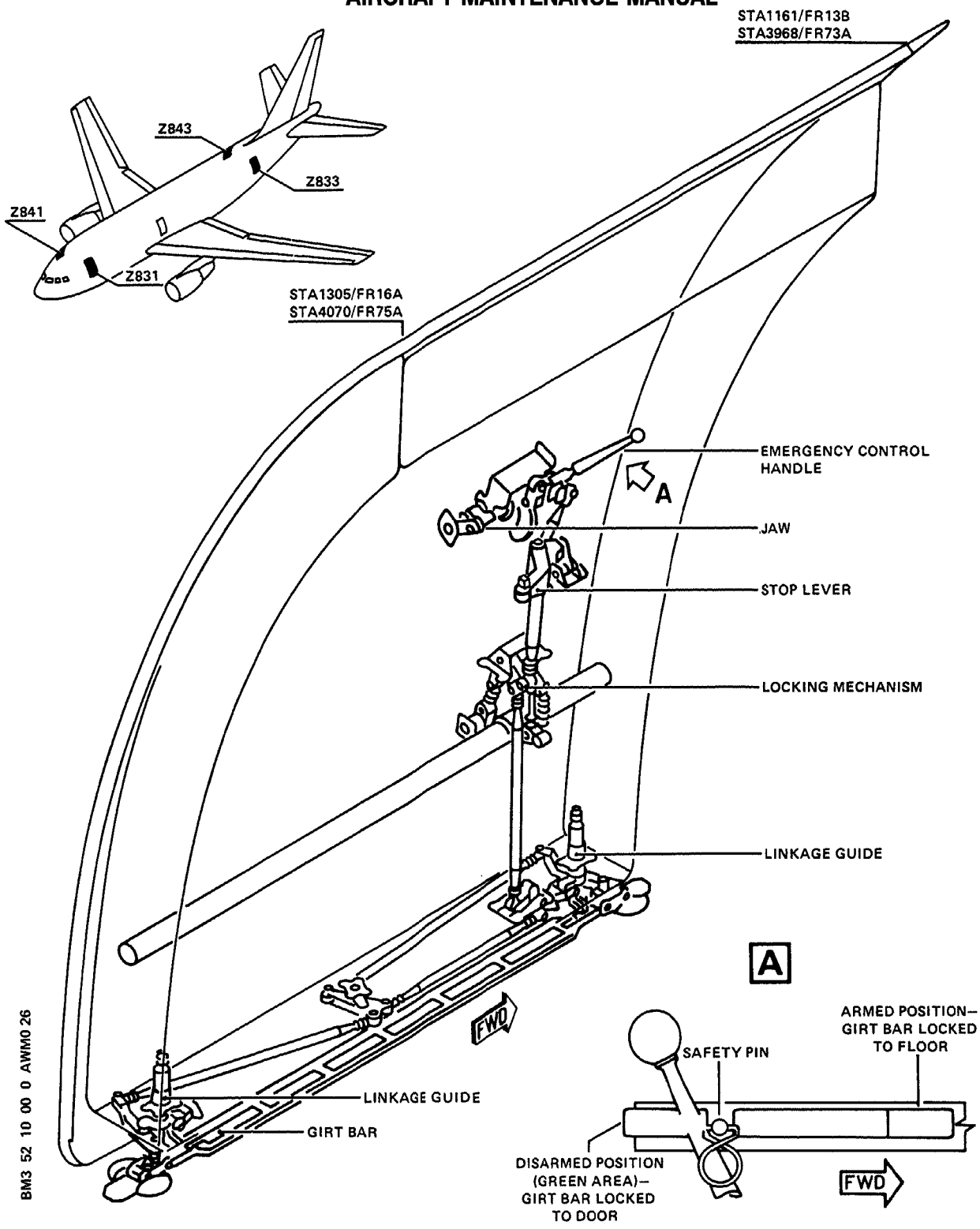
AFT Passenger/Crew Doors - Door Latches,
Locking Shaft
Figure 013



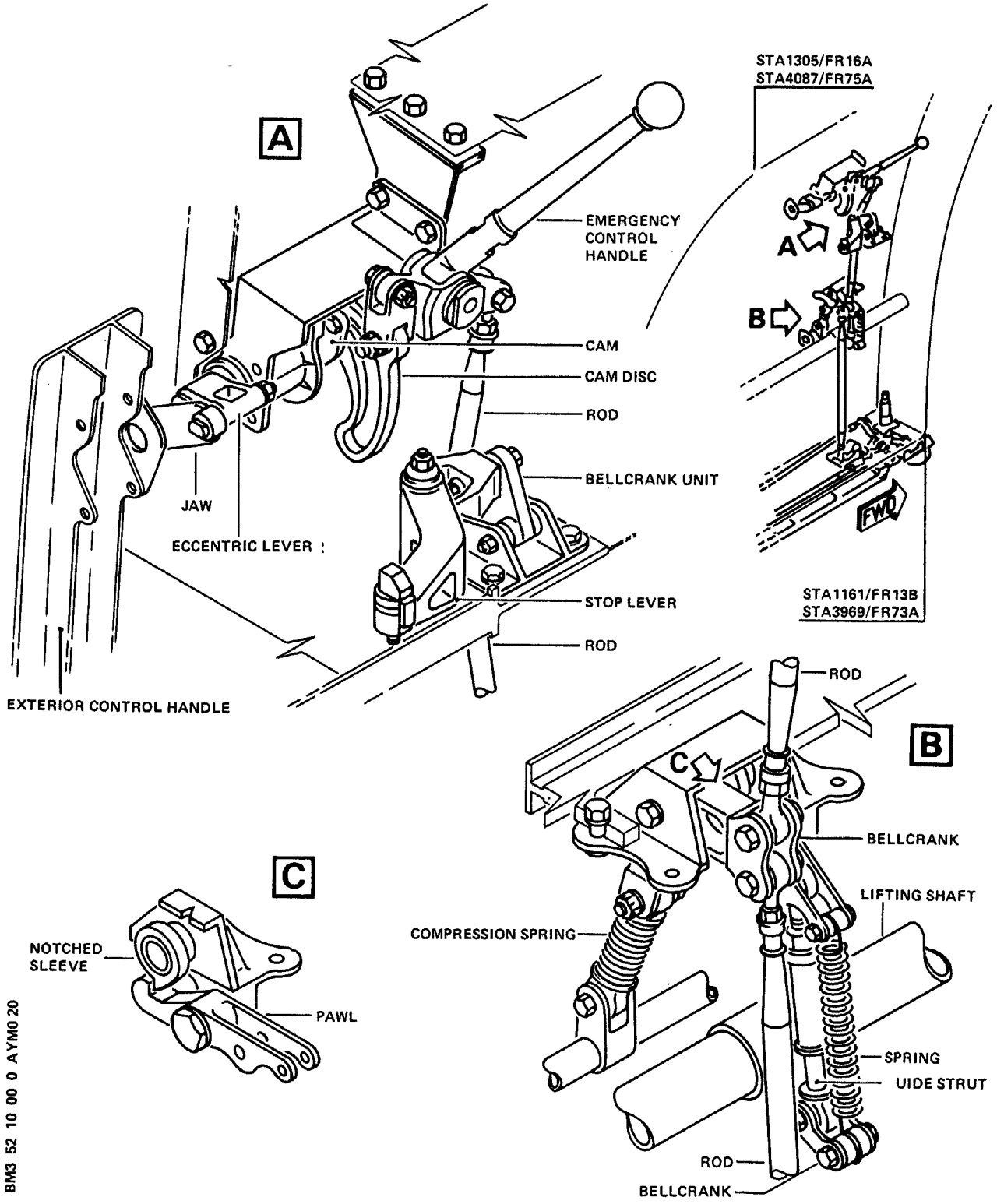
AFT Passenger/Crew Doors - Gear Box,
Lowering Shaft
Figure 014



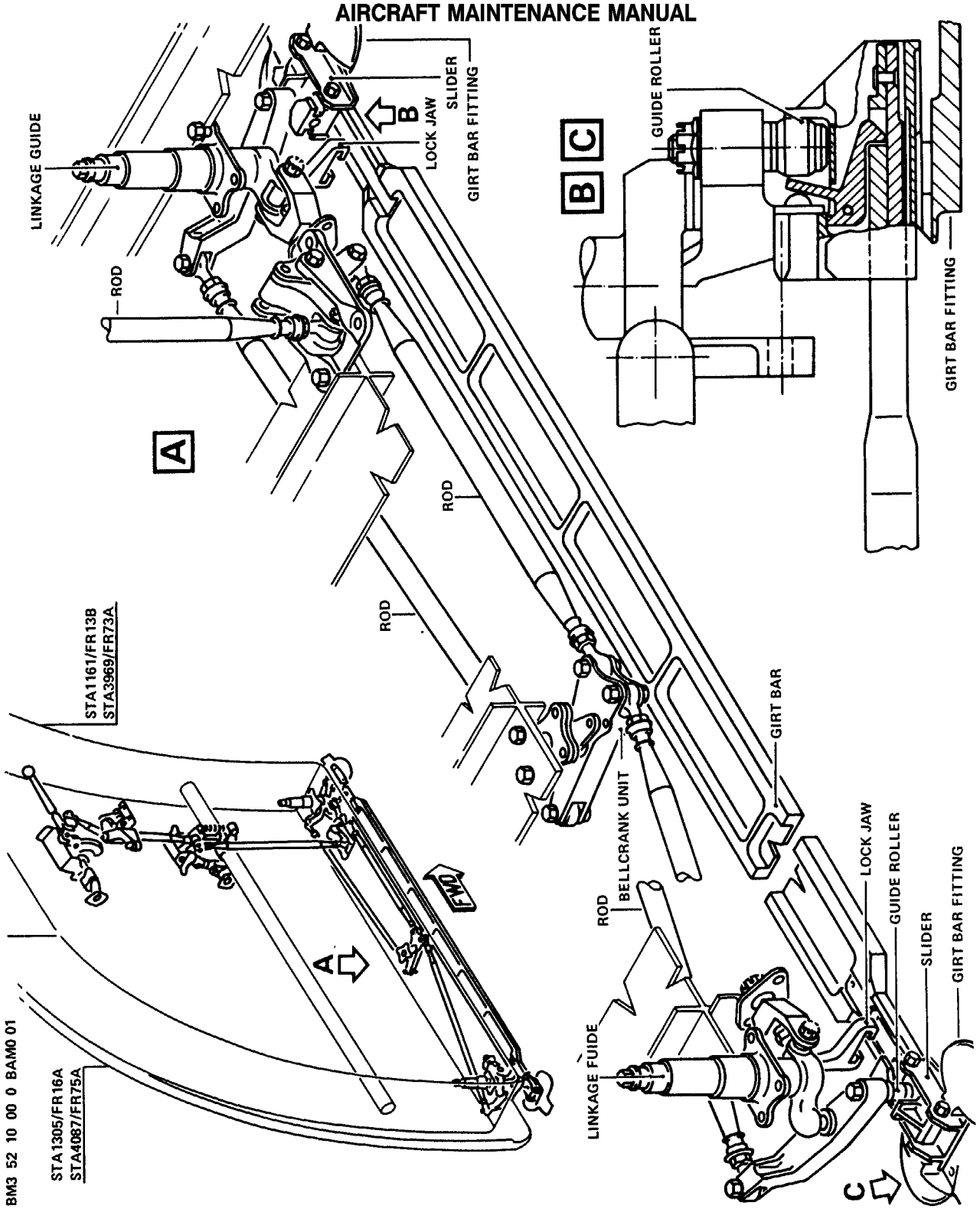
AFT Passenger/Crew Doors - Lifting Shaft,
Torsion Bar Spring
Figure 015



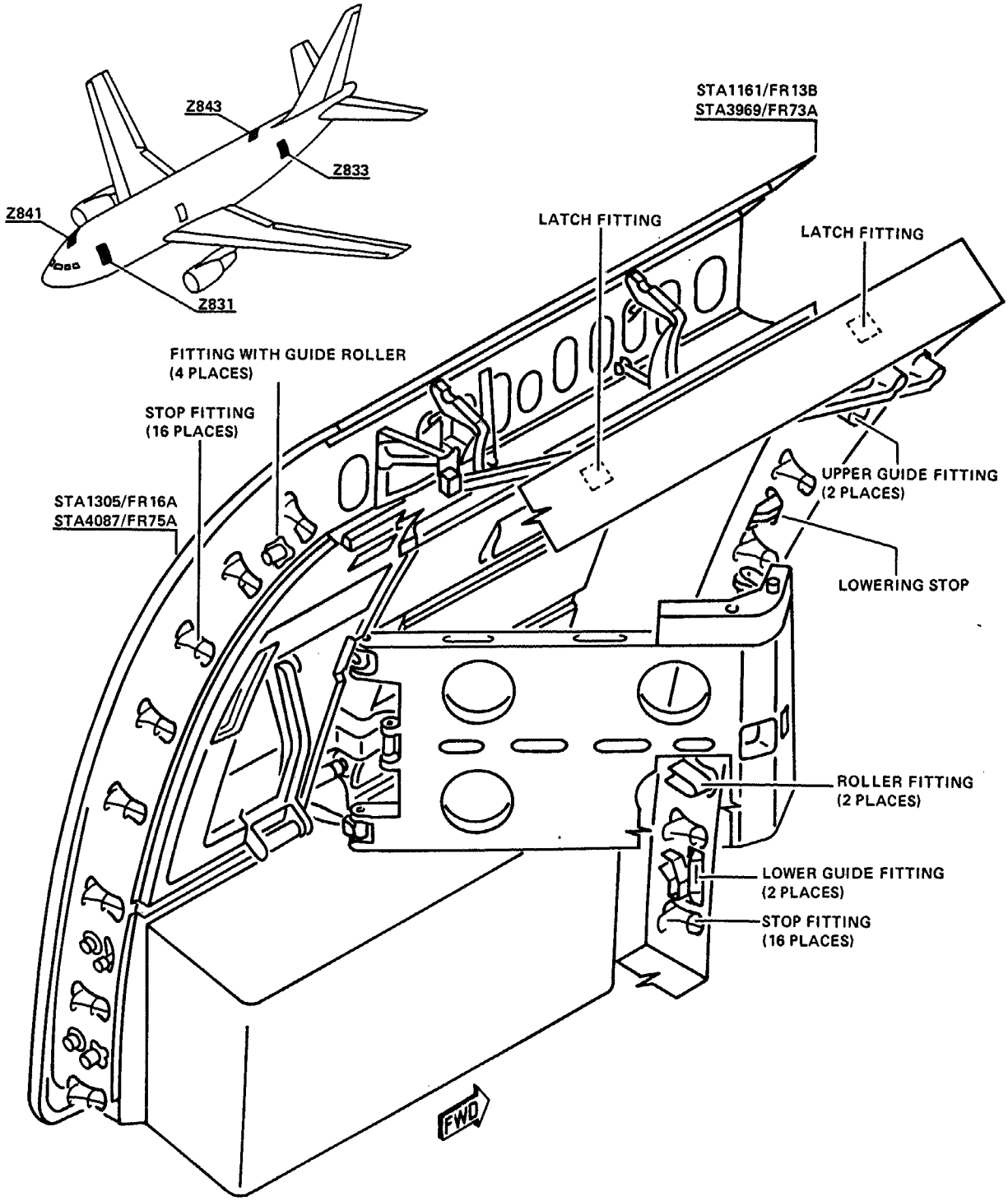
Emergency Escape Slide Release Mechanism (TYPICAL)
ON FWD AND AFT DOORS SERIAL NOS. 1162-1241
Figure 016



Release Mechanism and Locking Unit (TYPICAL)
ON FWD AND AFT DOORS SERIAL NOS. ALL
Figure 017



Linkage Guides, Bellcrank Unit, Girt Bar (TYPICAL)
ON FWD AND AFT DOORS SERIAL NOS. 1201, 1224-1241
Figure 018



BM3 52 10 00 0 BCM0 20

Latch and Stop Fittings (TYPICAL)
ON FWD AND AFT DOORS SERIAL NOS. ALL
Figure 019

4. Component Description

A. Door Structure, Door Seal and Drain Holes (Ref. Fig. 003)
The outer skin of the FWD door, together with the integral skinners, is milled from pre-stressed light alloy plate. The outer skin of the AFT door, together with the integral skinners, is chemically etched. The inner skin is made of light sheet metal and incorporates lightening holes and through-holes for the operating handles.
The door structure between the inner and outer skins consists of light sheet-metal edge and cross members and milled longerons. Titanium stop fittings, which take the load when the passenger compartment is pressurized, are bolted to the ends of the longerons (Ref. AMM 52-10-31).
A window is installed in the outer skin between longerons 4 and 5 (Ref. AMM 56-31-15).
The door seal, consisting of a rubber extrusion with equally spaced pressurization holes, ensures pressure-tight sealing of the door when the compartment is pressurized. The seal is installed around the inner edge of the outer skin and retained in situ by retainers and screws. When the door is closed, the seal is pressed into contact with a sealing section of the fuselage door frame and is inflated by cabin air pressure to form a pressure tight seal.
Each door is equipped with two hoist fittings riveted to the structure and outer skin on the right and left above the door center. The fittings are provided with threaded inserts to receive the hoisting lugs.
Holes are bored in the structure at the lowest collection points of longerons to allow liquids to drain from the door interior.

B. Door Suspension (Ref. Fig. 004, 005)
Doors are suspended by a support arm and two guide arms attached to the fuselage structure. The support arm is a cast light alloy box section with integral connection forks. Each connection fork is provided with standardized, bonded bushes.
The door is attached to the support arm by means of upper and lower connection links. The lower connection link is also connected to the lifting shaft of the door locking mechanism.
An adjustable door buffer attached to the inner face of the support arm acts as a limit stop and shock absorber when the door is fully open.
A door stay mechanism installed in the support arm locks the door in the fully open position. The mechanism comprises a release button, actuating rod and lever, bellcrank, spring-loaded rod and a locking hook.
The guide arms are located at the upper part of the door and attached to the door and fuselage structure with fittings that permit parallel link motion for the door travel. On the FWD doors, the upper guide arm is connected to the door structure by means of a bellcrank fitted on a spring rod cylinder damping sideways movement of the door. On the AFT doors, the upper guide arm is connected to the door structure by means of a hinged arm. The lower guide arm, on FWD and AFT doors, is connected to the door structure by means of a hinged arm.

C. Door Lining and Insulation (Ref. Fig. 006)
The door lining consists of panels which match the interior decor of the individual aircraft passenger compartment. A heat and soundproof insulation mat is provided between the door inner skin and the lining. Cut-outs are incorporated in both the lining and the insulation mat to facilitate the installation of the locking and emergency escape slide release mechanisms. the interior control and emergency control handles, the window and locking indicators.

D. Door Damper and Emergency Operation Cylinder (Ref. Fig. 007)
The door damper and emergency operation cylinder is installed on the support arm. The hydraulically operated door damper is used to control the speed at which the door is opened and closed. During normal operating conditions, damping is effected by hydraulic fluid passing from one chamber to another via a calibrated diaphragm when the door is being opened, and via a restrictor in the piston when the door is being closed. In the event of emergency conditions, the door damper acts as a jack to push the door in the required direction. When the door is opened under emergency conditions, the diaphragm is ruptured by the percussion device mechanism and the nitrogen pressure thus released into the cylinder converts the damper into an actuator.

NOTE : After emergency operation, the percussion device assembly must be removed in order to replace the diaphragm. (Ref. AMM 52-10-14, P.Block 401).

NOTE : After emergency operation the door can be completely closed only after the door damper and emergency operation cylinder has been discharged.
To permit door closing immediately after an emergency opening manoeuvre, the actuating cylinder is automatically depressurized through calibrated vent holes in the cylinder body which become free when the actuating cylinder is fully extended.
The actuating cylinder is depressurized within max. 3 seconds.

E. Door Locking Mechanism (Ref. Fig. 008, 009, 010)
(Ref. Fig. 011, 012, 013)
(Ref. Fig. 014, 015)
The door control handles which rotate about their horizontal axis are installed to facilitate operation of the door locking mechanism from both the inside or outside of the door. The shafts of the two handles are coupled via a gearbox thereby permitting independent operation.

Rods are connected to a bellcrank hinged on the gearbox and routed into the lower door section to the lifting shaft. The lifting shaft is fitted with eccentrically mounted arms which are equipped with rollers sliding in door frame mounted roller fittings to lift the door. The shaft is also connected to a support arm via a rod, a lever and a connection link, and to the torque shaft via a rod assembly and a bellcrank. The torque shaft and torsion bar spring compensate for the weight of the door.

Similarly, rods are connected from the gearbox and hinged bellcrank to the upper door section to the locking shaft which retracts or extends the door latches when the door is respectively opened or closed. The latches are connected by rods and bellcranks to the locking shaft and a spring rod cylinder, connected to each latch bellcrank, is attached to the door structure. An arm on each bellcrank forms the locking indicator.

A lowering shaft, also installed in the upper door section, acts via a rod on a locking hook to block the gearbox when the door is open. The door cannot, therefore, be lowered when in the open position.

The lifting, lowering and locking shafts all rotate in ball bearings.

Fittings, complete with rollers, are installed on both sides of the door. They mate with corresponding guide tracks which are located on the LH and RH sides of the door frame parallel to the outer skin and vertical to the door frame.

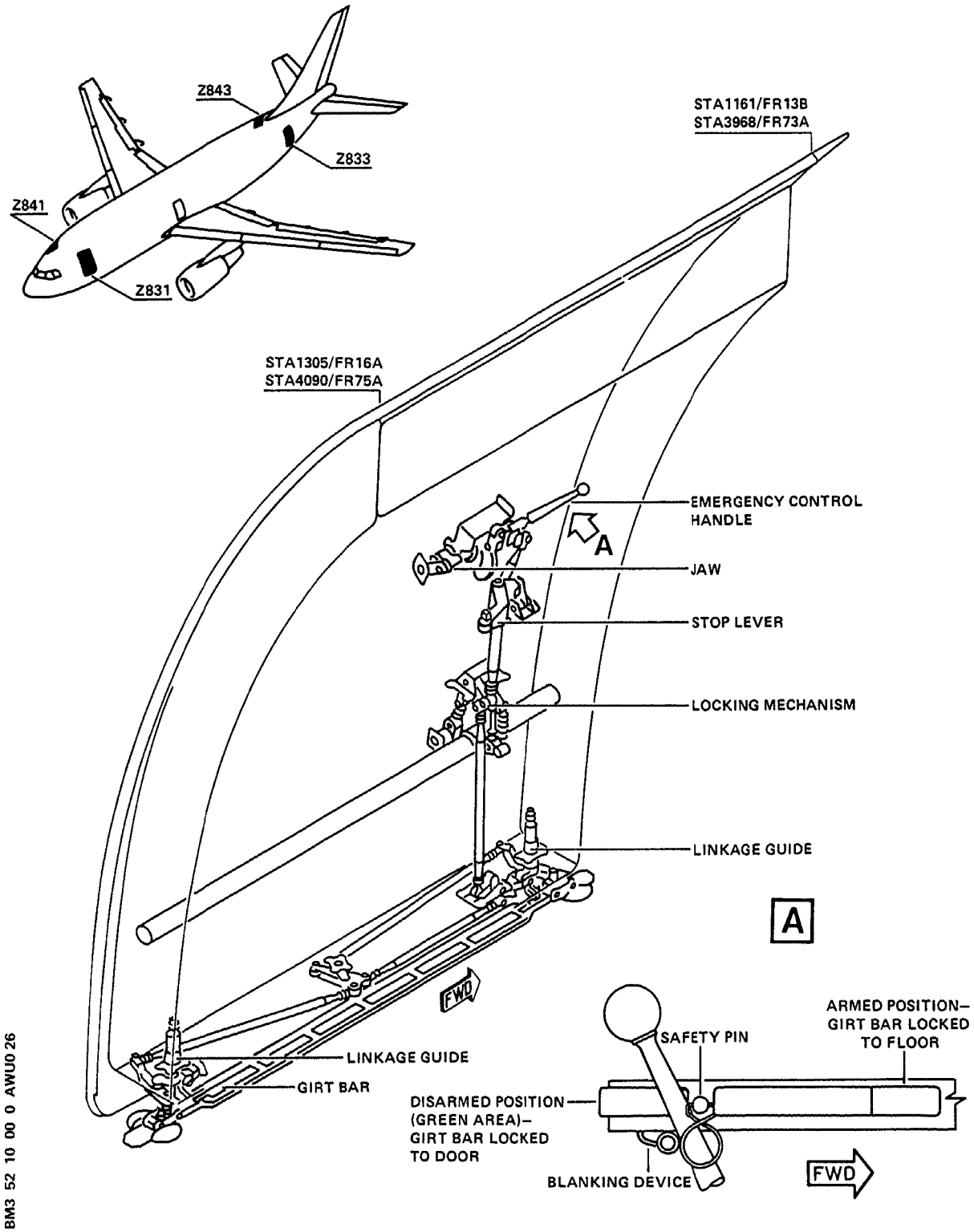
The exterior control handle is connected via a jaw to the emergency escape slide mechanism, to disarm the system when the door is opened.

The door locking mechanism actuates a limit switch of the Door Warning System. A second limit switch which is installed in the fuselage door frame is actuated by the door latches.

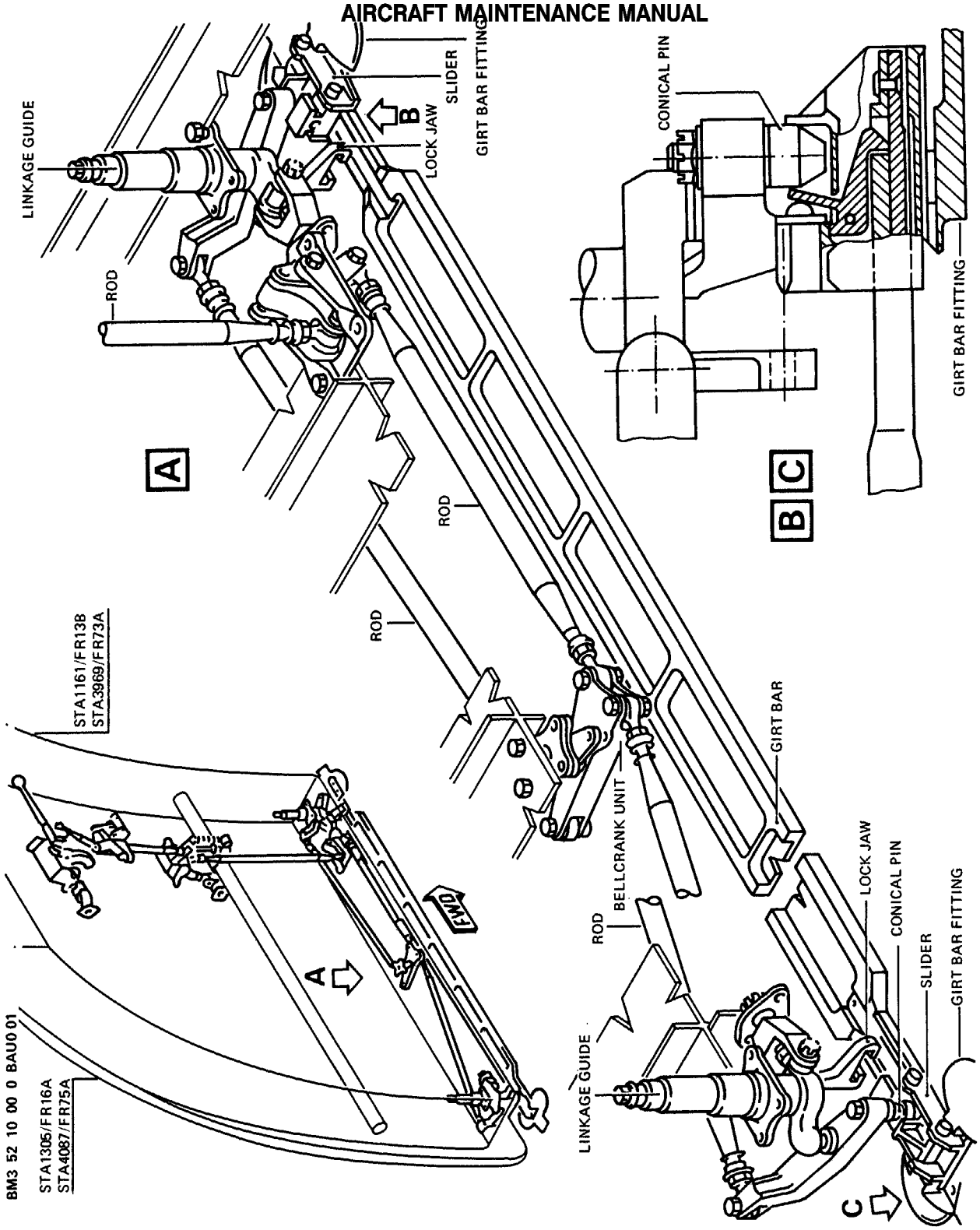
F. Emergency Escape Slide Release Mechanism
(Ref. Fig. 016, 017, 018)
(Ref. Fig. 020)
(Ref. Fig. 021)

** ON FWD AND AFT DOOR SERIAL NOS. 1162-1241

The emergency escape slide release mechanism, located in the lower door section, comprises a two-position control handle, composite linkage, bellcranks and linkage guides. It is connected to the door structure by bearings and guides.



Emergency Escape Slide Release Mechanism (TYPICAL)
ON DOORS SERIAL NOS. 1245 AND SUBSEQUENT
Figure 020



Linkage Guides Bellcrank Unit, Girt Bar (TYPICAL)
ON DOOR SERIAL NOS. 1162, 1172, 1191, 1245 AND SUBSEQUENT
Figure 021

**** ON FWD AND AFT DOOR SERIAL NOS. 1245 AND SUBSEQUENT**

The emergency escape slide release mechanism, located in the lower door section, comprises a two-position control handle, composite linkage, bellcranks and linkage guides. It is connected to the door structure by bearings and guides. A blanking device is provided to prevent the control handle safety pin being inserted when the control handle is in any position but fully disarmed.

**** ON FWD AND AFT DOOR SERIAL NOS. ALL**

The emergency control handle, which can be manually operated only, is located adjacent to the interior control handle. It has two setting positions, fully forward (armed position) and fully aft (disarmed) position. The connection between the emergency control handle and the door locking mechanism is established by a cam disc and a roller locating in the jaw of the exterior control handle.
When the exterior control handle is operated to open the door, the release mechanism for the emergency escape slide and emergency door opening is returned to the fully aft position via the jaw and roller.
The door damper and emergency operation cylinder, which open the door in the event of an emergency or damps the door under normal conditions, is installed on the support arm. The release lever of the door damper and emergency operation cylinder is operated by a pivoting stop lever. The stop lever is connected to the emergency control handle via a rod and a bellcrank unit. A rod connects the stop lever bellcrank unit to a locking mechanism to block the emergency escape slide release mechanism when the door is open. The rod is connected to a bellcrank loaded by a helical compression spring and to a notched sleeve. A pawl in the notched sleeve, when locked, is connected via a guide strut and spring to the lifting shaft. An additional rod connects the bellcrank of the locking mechanism to the bellcrank unit of the linkage guide in the lower door section.

**** ON FWD AND AFT DOOR SERIAL NOS. 1201, 1224-1241**

The girt bar is suspended in sliders below the door. The guide rollers of the linkage guide engage in the sliders when disarmed and disengage from the sliders in the armed position. The fuselage girt bar fittings receive the sliders in the armed position and retain the girt bar connected by strips to the door-mounted emergency escape slide.

**** ON FWD AND AFT DOOR SERIAL NOS. 1162, 1172, 1191, 1245 AND SUBSEQUENT AFTER SB 52-2003 ON DOOR SERIAL NOS. 1201, 1224-1241**

The girt bar is suspended in sliders below the door. The conical pins of the linkage guide engage in the sliders when disarmed and disengage from the sliders in the armed position. The fuselage girt bar fittings receive the sliders in the armed position and retain the girt bar connected by strips to the door-mounted emergency escape slide.

** ON FWD AND AFT DOOR SERIAL NOS. ALL

G. Latch and Stop Fittings
(Ref. Fig. 019)
The two edge members of the door are equipped with eight stop fittings each with corresponding matching fittings mounted on the fuselage door frame. The door stop fittings on either side of passenger/crew door are equipped with adjustable bolts.
A lowering stop is installed on the forward side of the fuselage door frame between the third and fourth stop fittings. The lowering stop on the AFT passenger/crew door is adjustable, but that on the FWD passenger/crew door is fixed. When the door is closed, the roller of the lowering shaft contacts the lowering stop causing the shaft to rotate to unlock the gearbox and lower the door.
Upper and lower guide fittings are attached to each side of the fuselage door frame. The upper fittings have an adjustable stop incorporated to enable final settings to be made to the door.
A total of four fittings with guide rollers are mounted on the edge members of the door in the upper and lower areas. The guide rollers locate and run in the corresponding guide fittings on the fuselage door frame when the door is being closed.
Roller fittings mounted on the fuselage door frame support the lifting shaft during the lifting movement of door opening.
On the AFT passenger/crew door, adjustable latch fittings are mounted on the upper fuselage door frame. They are fitted with rollers to receive the door latches. On the FWD passenger/crew door, the rollers are installed on integral lugs in the upper fuselage door frame.

5. Operation

A. Opening
(1)From Passenger Compartment - Normal Operation
(Ref. Fig. 022)

**ON A/C 001-003,

WARNING : RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : BEFORE SUPPLYING AIR BY EXTERNAL SOURCE OR APU MAKE CERTAIN THAT:
- AT LEAST ONE FLT COMPT WINDOW OR CABIN DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
- IF THE A/C IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR, OR AVIONICS ACCESS DOOR 121BL IS OPEN AND REMAINS OPEN DURING SERVICING.

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

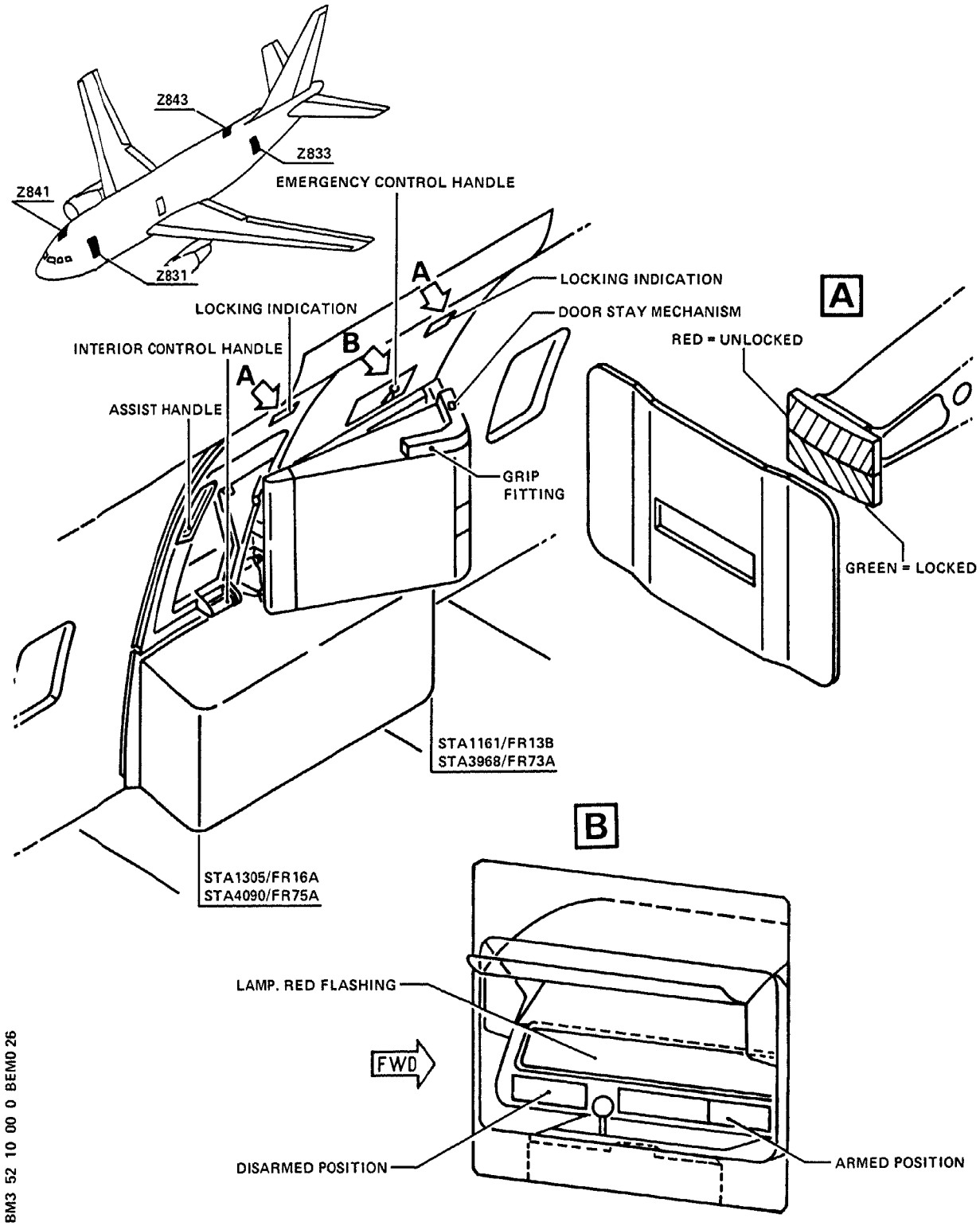
WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

**ON A/C ALL

WARNING : PRIOR TO OPENING THE DOOR DURING NORMAL OPERATION THE EMERGENCY CONTROL HANDLE MUST BE SET TO THE FULLY AFT POSITION.

Lifting the interior control handle releases the door locking mechanism. The movement of the handle is transferred via the gearbox, bellcranks and rods to the lifting and locking shafts. The lifting shaft eccentrically mounted arms equipped with rollers sliding in the door latches are retracted by the locking shaft, the door can be lifted clear of the stops and swung outwards. When the locking shaft is rotated, the bellcranks mounted on it and connected by spring rod cylinders are pulled into a dead-center position, the mechanism being forced to overcome a center of pressure during this process. The door is damped by the door damper and emergency operation cylinder, guided by the two guide arms and, carried by the support arm, it swings outward in the direction of flight until it contacts the door buffer. The door stay mechanism locks the door in the open position.

(2)From Outside - Normal Operation



Opening from Passenger Compartment - Normal Operation
Figure 022

(Ref. Fig. 023)

**ON A/C 001-003,

WARNING : RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : BEFORE SUPPLYING AIR BY EXTERNAL SOURCE OR APU MAKE CERTAIN THAT:
- AT LEAST ONE FLT COMPT WINDOW OR CABIN DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
- IF THE A/C IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR OR AVIONICS ACCESS DOOR 121BL IS OPEN AND REMAINS OPEN DURING SERVICING.

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

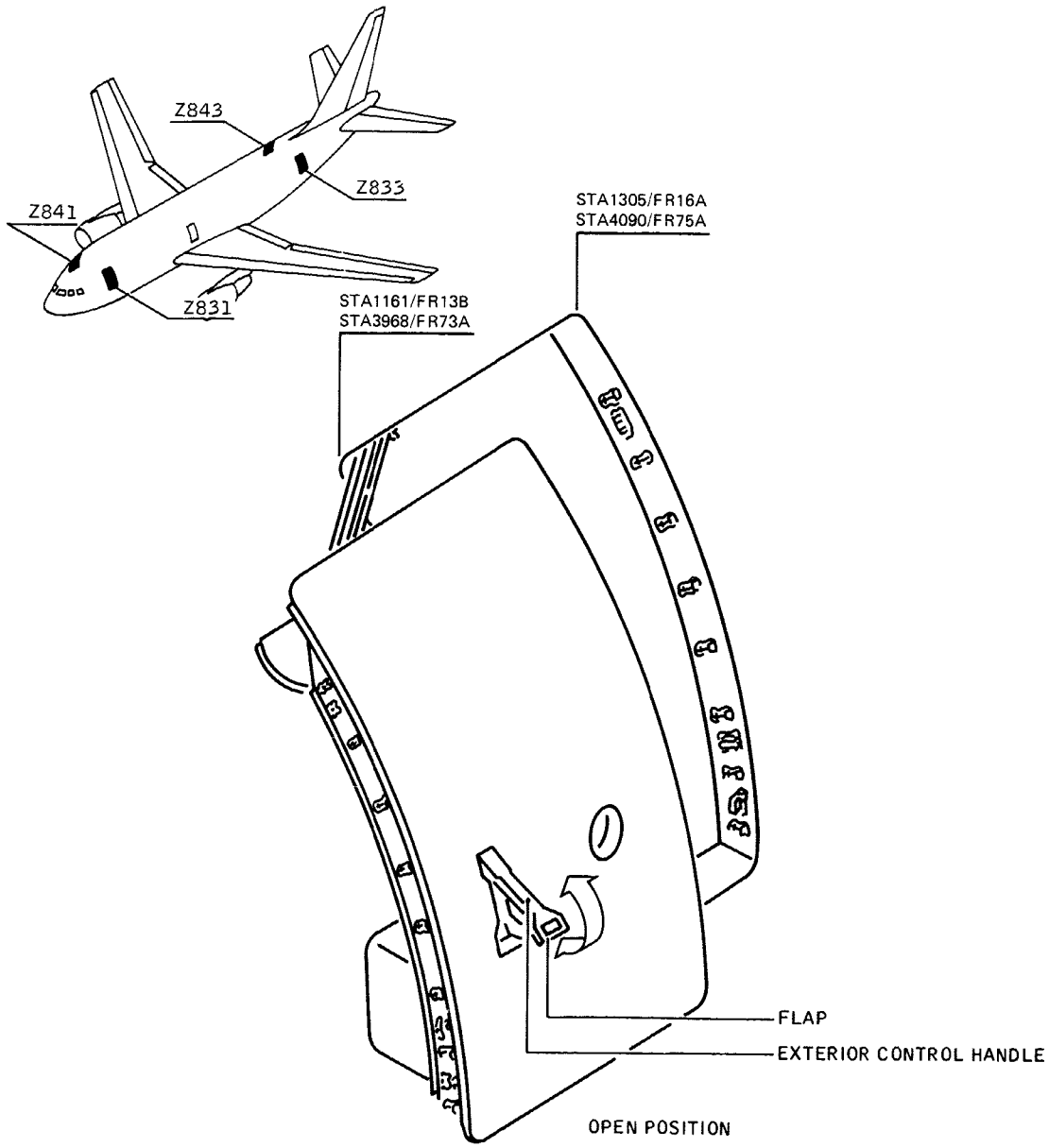
WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

**ON A/C ALL

NOTE : When opening the door from the outside of the passenger compartment, the position of the emergency escape slide release mechanism is of no importance. The exterior control handle automatically unlocks the emergency escape slide release mechanism via the gearbox to place it in the fully aft position.

Push the flap of the exterior control handle and lift the handle upwards. A jaw in the control handle moves an eccentric lever. The cam and disc mechanism then moves the emergency control handle to the fully aft position and locks the girt bar to the door thereby prohibiting escape slide operation.

The movement from the emergency control handle is transferred via a rod to a bellcrank causing the stop lever for the door damper and emergency operation cylinder to be swivelled into the release position. As the door is lifted, the release lever of the passenger door damper and emergency operation cylinder is pushed upward by the stop lever. The stop lever and door are lifted while the door damper and emergency operation cylinder mounted on the support arm remains in position.



BM3 52 10 00 0 BGM0

Opening from outside - Normal Operation
Figure 023

Another rod operates a locking mechanism connected via a bellcrank, a tension spring, a compression spring and a guide unit to the structure and lifting shaft. As the door is lifted, the pawl is operated by the rotation of the lifting shaft. It engages in the notched sleeve and blocks the emergency escape slide release mechanism when the door is open. The movement is transferred by a rod connecting the bellcrank of the locking mechanism to a two-way connection on the LH and RH linkage guides to sliders.
The guide rollers of the linkage guide move the sliders into lock jaws on the lower door frame web and support the girt bar. The door opening mechanism then functions identically to the method described when the door is opened from inside the passenger compartment.

(3)Emergency Operation

NOTE : Emergency operation of the door opening procedure is only possible from the passenger compartment. The emergency control handle must be in the fully forward position.

Lifting the interior control handle unlocks and raises the door and activates the door damper and emergency operation cylinder. The pressurized door damper and emergency operation cylinder assist the door opening operation and release cords activate the compressed air bottles to operate the emergency escape slide.

NOTE : Once an emergency operation of the door has been performed, it is not possible to close the door until the door damper and emergency operation cylinder has been discharged, and the emergency control handle reset in the fully aft position.

B. Closing

(1)Closing from Passenger Compartment (Ref. Fig. 022)

Prior to closing the door, the door stay mechanism must be released. This is accomplished by pressing the release button on the grip fitting mounted on the support arm. The locking hook, in the lower position of the support arm, is released by a rod and lever.

NOTE : When releasing the door stay mechanism, the door should be moved towards the closed position to prevent the stay mechanism re-engaging.

Using the assist handle, the door can then be swung into the fuselage door frame, guided by the two guide arms and carried by the support arm. As the door is pulled into the fuselage door frame the roller on the lowering shaft contacts the fitting for the lowering safety mechanism and is forced back. The resulting rotation of the lowering shaft causes a locking hook to be retracted via the rod connection and the lowering safety mechanism to be unlocked.
Operating down the interior control handle lowers the door via the operating mechanism and lowering shaft and locks the door. The two visual indicators, at the top section of the door, change colour from red to green when the door is locked.
To engage the emergency escape slide release mechanism, the emergency control handle must be placed in the fully forward position.

(2)Closing from Outside (Ref. Fig. 023)
Prior to closing the door, the door stay mechanism must be released. This is accomplished by pressing the release button on the grip fitting mounted on the support arm. The locking hook, in the lower position of the support arm, is released by a rod and lever.
The door can then be pushed into the fuselage door frame guided by the two guide arms and carried by the support arm.
Pushing down on the exterior control handle will lower and lock the door.

6. Interface
Not applicable

1. Reason for the Job

To set the passenger/crew door (referred to as pax door) in a satisfactory condition after it has been jammed in the door frame caused by an activated door damper and emergency operation cylinder (referred to as door damper).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.5 m (14.7 ft.)
Referenced Procedures	
- 11-32-52, P. Block 1	Doors - Interior Placards and Markings
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	Door Lining and Insulation
- 52-10-14, P. Block 301	Door Damper and Emergency Cylinder-Servicing

3. Procedure

3. Procedure

A. Job Set-Up
(1)Position an access platform below the jammed pax door.
(2)Disarm the emergency escape slide mechanism of the jammed pax door and deactivate the door damper (Ref. 52-10-00, P. Block 301).
(3)Remove the upper support arm lining (Ref. 52-10-13, P. Block 401).

B. Setting Procedure
(1)Make sure that the door damper is fully discharged (Ref. 52-10-00, P. Block 301).
(2)Open the pax door.
(3)Replace the diaphragm in the percussion mechanism of the door damper (Ref. 52-10-14, P. Block 301).
(4)Make sure that the door damper is charged with dry air or nitrogen in accordance with the pressure shown on the placard (Ref. 11-32-52, P. Block 1).

NOTE : The placard is located on the top of the support arm or on the door frame lining.

C. Test
(1)Make sure that the applicable pax door operates satisfactorily (Ref. 52-10-00, P. Block 601).
(2)Check the door damper for leakage of dry air or nitrogen (Ref. 52-10-14, P. Block 601).

D. Close-Up
(1)Make certain that the work area is clean and clear of tools and mis-

cellaneous items of equipment.
(2)Install the upper support arm lining (Ref. 52-10-13, P. Block 401).
(3)Activate the door damper and arm the emergency escape slide release mechanism (Ref. 52-10-00, P. Block 301).
(4)Make sure that the applicable pax door is closed.
(5)Remove access platform.

PASSENGER/CREW DOORS - SPECIAL PRECAUTIONS

1. General

This topic covers the following procedures:

A. Maintenance operation procedure which must be carried out before and after any maintenance operations are undertaken on the passenger/crew doors.

B. Relief of system pressure after emergency operation.

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.20 to 4.40 m (13.8 to 14.5 ft.)
B. 98A52107632000	Safety Pin Set - Emergency Control Handle
C. 701-2978000	Pin Safety - Passenger Door Damper and Emergency Operation Cylinder
R D. Material 19-010	Lockwire, Corrosion-Resistant Steel,
E.	Circuit Breaker Safety Clips and Tags

R 3. Procedure

(Ref. Fig. 301)

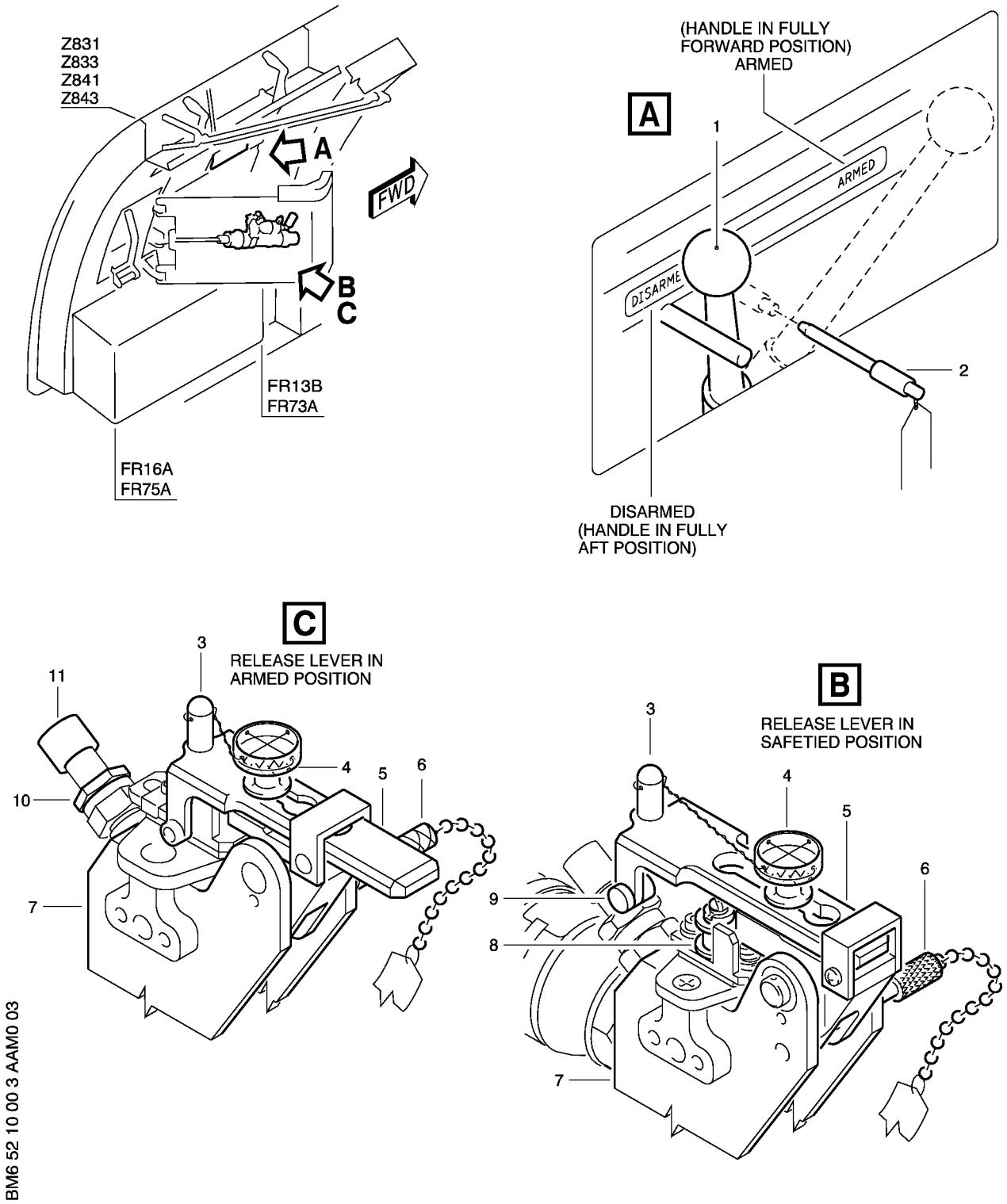
**ON A/C 001-003,

R A. Maintenance Operation Procedure

WARNING : RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : BEFORE SUPPLYING AIR BY EXTERNAL SOURCE OR APU MAKE CERTAIN THAT:
- AT LEAST ONE FLT COMPT WINDOW OR CABIN DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
- IF THE A/C IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR, OR AVIONICS ACCESS DOOR 121BL IS OPEN AND REMAINS OPEN DURING SERVICING.

R (1)Special precautions before the door is opened from inside.
R (a)Safety the emergency escape-slide release-mechanism as follows:
R 1 Make sure that the emergency control handle (1) is in the DISARMED position.
R 2 Install the safety pin (2) PN 98A52107632000 to make sure that
R you cannot move the emergency control handle (1) to the ARMED
R position.
R (b)Open, safety and tag the following circuit breakers:



FWD and AFT Passenger/Crew Doors
Safety Pin and Percussion Mechanism
Figure 301

R

EFFECTIVITY: ALL

PIA

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

R A. Maintenance Operation Procedure

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

R (1)General Precaution
R (a)Look through door window and make sure that red warning light CABIN PRESSURE is not flashing.
R (b)If red warning light CABIN PRESSURE is flashing, stop any air supply to passenger compartment and wait until warning light stops flashing before you open door.

R (2)Special precautions before the door is opened from inside
R (a)Safety the emergency escape-slide release-mechanism as follows:
R 1 Make sure that the emergency control handle (1) is in the DISARMED position.
R 2 Install the safety pin (2) PN 98A52107632000 to make sure that
R you cannot move the emergency control handle (1) to the ARMED
R position.
R (b)Open safety and tag the following circuit breakers:

**ON A/C ALL

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM/WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

R (3)Open the related passenger/crew door to get access to the door
R damper and emergency operation cylinder (referred to as door damper).
R (4)Put the percussion mechanism of the door damper in its disarmed
R position as follows:

R **WARNING : WEAR GOGGLES WHEN YOU REMOVE OR INSTALL LOCKWIRE.**
R **CUT, REMOVE AND DISCARD THE LOCKWIRE AS YOU DO THE TASK.**
R **LOOSE LOCKWIRE CAN CUT OR BLIND YOU.**

R (a)Install the rigging pin (6) PN 701-2978000 to prevent accidental
R operation of the door damper.
R (b)Remove and discard the lockwire from the knurled screw (4) and
R the lever pin (3).
R (c)Loosen the knurled screw (4) until you can move the release lever
R (5).
R (d)Retract the release lever (5) until the knurled nut (4) can engage
R with its first notch.
R (e)Tighten the knurled screw (4) and safety it with lockwire
R (Material 19-010).
R (5)Special Precautions after work on the passenger crew door.

R **WARNING : WEAR GOGGLES WHEN YOU REMOVE OR INSTALL LOCKWIRE.**
R **CUT, REMOVE AND DISCARD THE LOCKWIRE AS YOU DO THE TASK.**
R **LOOSE LOCKWIRE CAN CUT OR BLIND YOU.**

R (a)Cut and remove the lockwire from the knurled screw (4) and the
R lever pin (3).
R (b)Loosen the knurled screw (4) until you can move the release
R lever (5).

R **CAUTION : MAKE SURE THAT THE RELEASE LEVER IS FULLY EXTENDED AND THE**
R **KNURLED NUT TOUCHES THE END OF THE LEVER SLOT. A DIFFERENT**
R **POSITION WILL PREVENT THE CORRECT OPERATION OF THE DOOR DAMPER**
R **AND EMERGENCY OPERATION CYLINDER IN THE EMERGENCY MODE.**

R (c)Put the percussion mechanism of the door damper and emergency
R operation cylinder in its armed position as follows:
R 1 Make sure that the guide rollers (9) of the release lever (5)
R aligns with the flanged nut of the valve guide (8).
R 2 Move the release lever (5) to its fully extended position
R and hold it.
R 3 Make sure that the recess of the knurled screw (4) can fully
R engage in the rear notch of the release lever (5).
R 4 Tighten the knurled screw (4) and safety it with lockwire
R (Material No. 19-010) on the lever pin (3).
R (d)Remove the safety pin (701-2978000) (6) from the percussion
R housing (7).
R (6)Remove safety clips and tags and close circuit breakers 1WN, 2WN.

R B. Relief of System Pressure after Emergency Operation
(Ref. Fig. 301)
NOTE : Carry out this procedure only after emergency operation.

R (1)Loosen the slackening nut (10) by 2 1/4 turns to release pressure
R through charging valve (11).

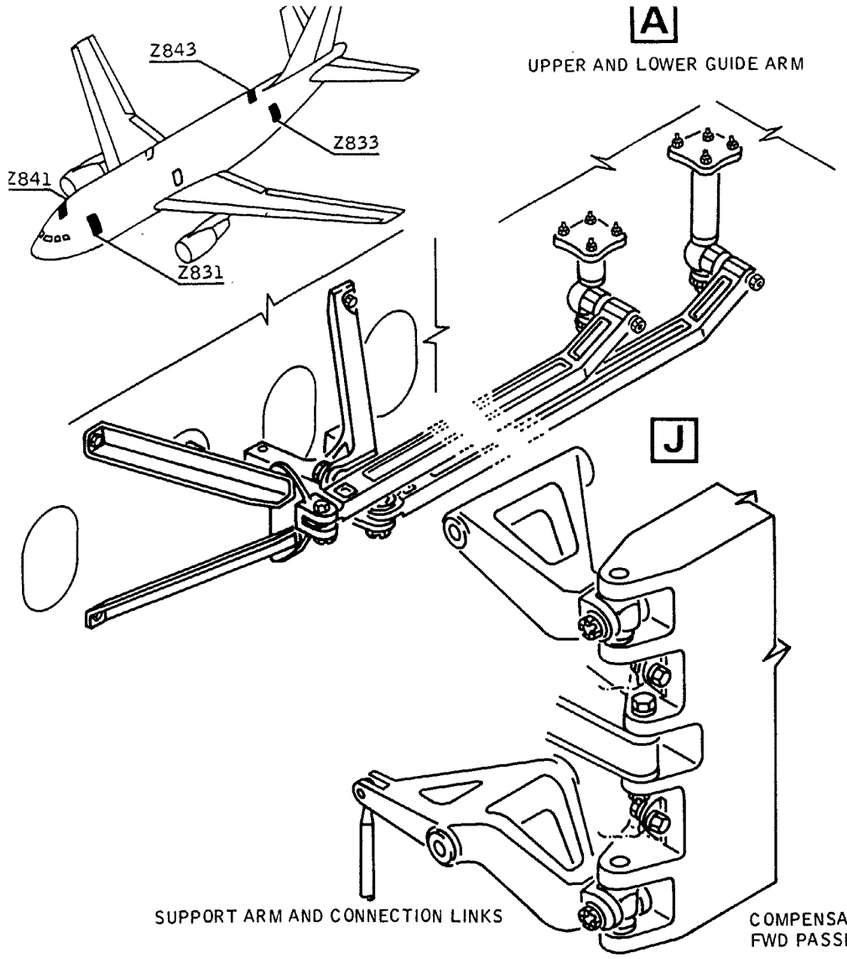
R (2)When pressure gage indicates zero pressure, retighten nut (10).

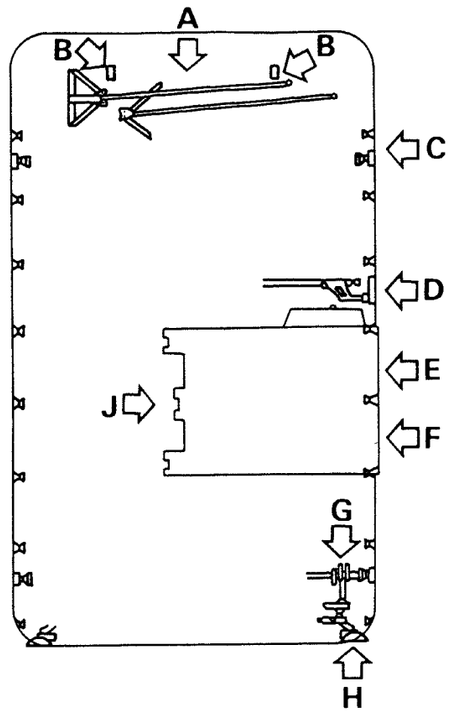
1. Adjustment of FWD and AFT Passenger/Crew Doors
(Ref. Fig. 501)
(Ref. Fig. 502)
Data related to adjustment of passenger/crew doors are subdivided in blocks as follows:
NOTE : Complete adjustment/test procedures after removal/installation are incorporated in the relevant topics of R/I of FWD and AFT passenger/crew doors.
- Adjustment of upper and lower guide fittings/stop fittings
(Ref. 52-10-11, P. Block 501)
- Adjustment of door latches
(Ref. 52-10-11, P. Block 501)
- Adjustment of girt bar fittings
(Ref. 52-10-11, P. Block 501)
- Adjustment of lowering stop
(Ref. 52-10-11, P. Block 501)
- Adjustment of compensation mechanism
(Ref. 52-10-11, P. Block 501)
- Adjustment of door buffer
(Ref. 52-10-11, P. Block 501)
- Adjustment of support arm and connection links
(Ref. 52-10-12, P. Block 501)
- Adjustment of upper and lower guide arm
(Ref. 52-10-12, P. Block 501)
- Adjustment of door damper and emergency operation cylinder
(Ref. 52-10-14, P. Block 501)
- Adjustment of door locking
(Ref. 52-10-20, P. Block 501)
- Adjustment of door closed position
(Ref. 52-10-20, P. Block 501)
- Adjustment of door high position
(Ref. 52-10-20, P. Block 501)
- Adjustment of locking of door mechanism in high position
(Ref. 52-10-20, P. Block 501)
- Adjustment of exterior control handle (Ref. 52-10-20, P. Block 501)
- Adjustment of interior control handle
(Ref. 52-10-20, P. Block 501)
- Adjustment of emergency escape slide release mechanism
(Ref. 52-10-30, P. Block 501)
- Adjustment of switches-door warning
(Ref. 52-71-11, P. Block 501)
- Adjustment of limit switches
(Ref. 52-73-13, P. Block 501)

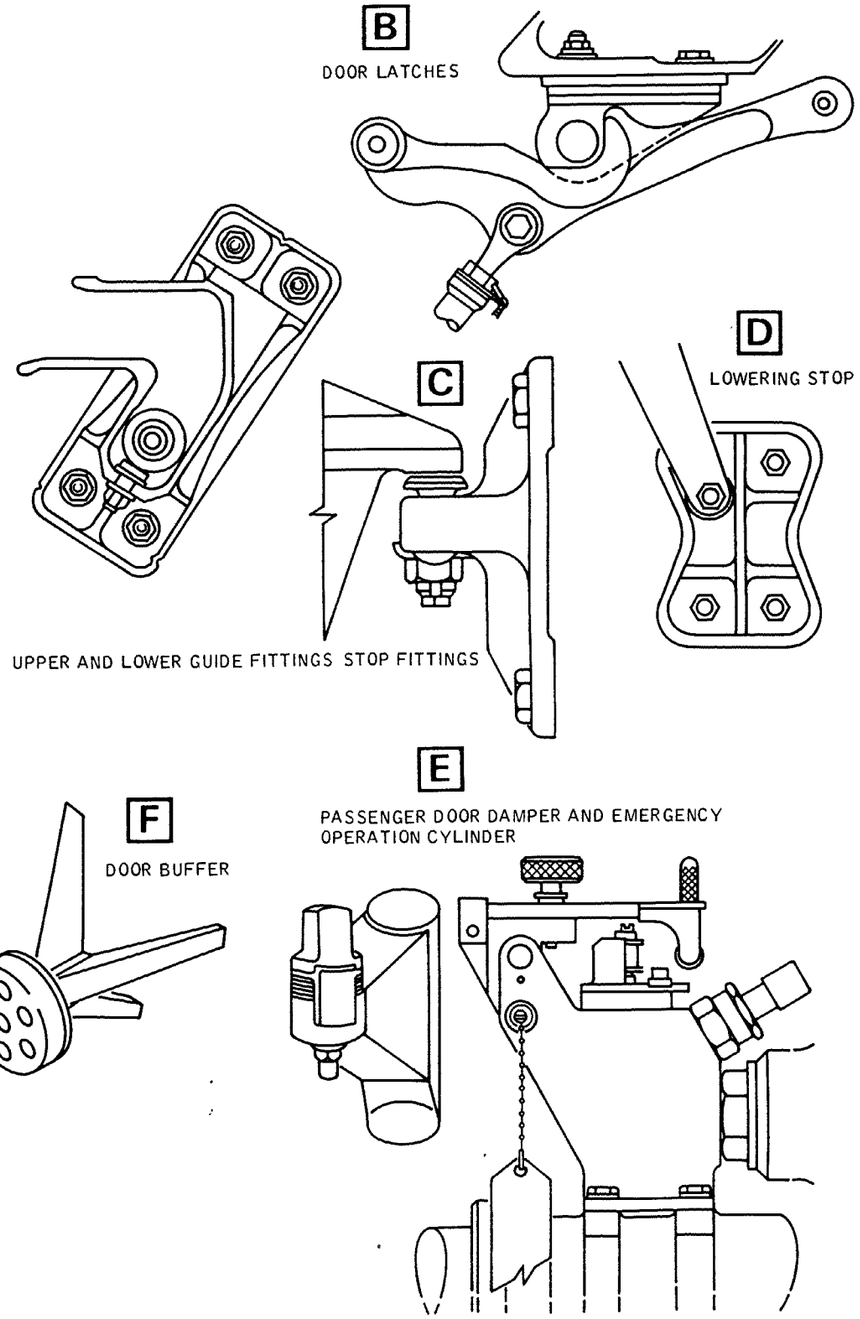
R - Adjustment of preload of the cover plate at FWD passenger/crew Door only
R (Ref. 52-10-11, P. Block 501)

INTENTIONALLY BLANK

Printed in France







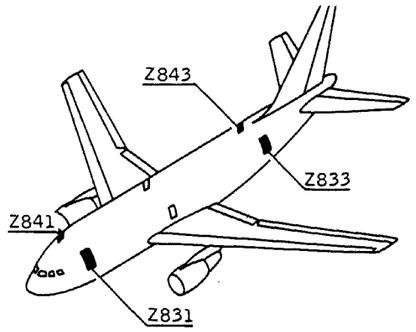
BM3 52 10 00 5 AAM0

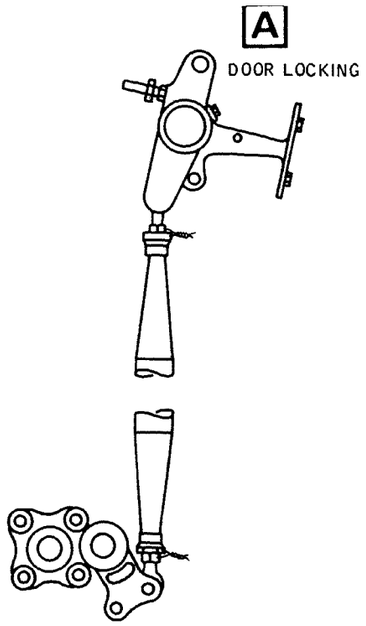
FWD and AFT Pass./Crew Doors
External Components
Figure 501

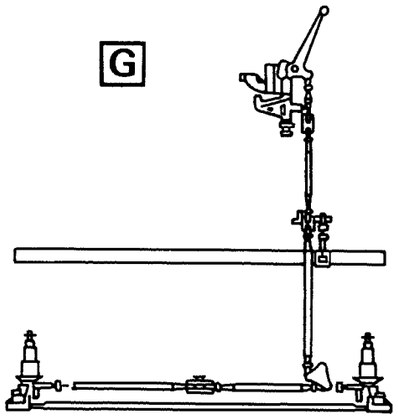
EFFECTIVITY: ALL

PIA

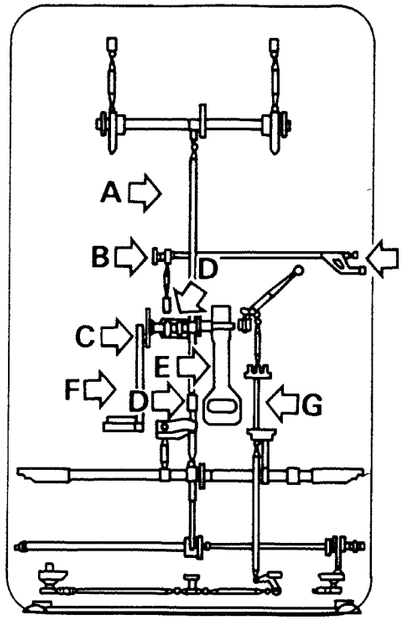
Printed in France

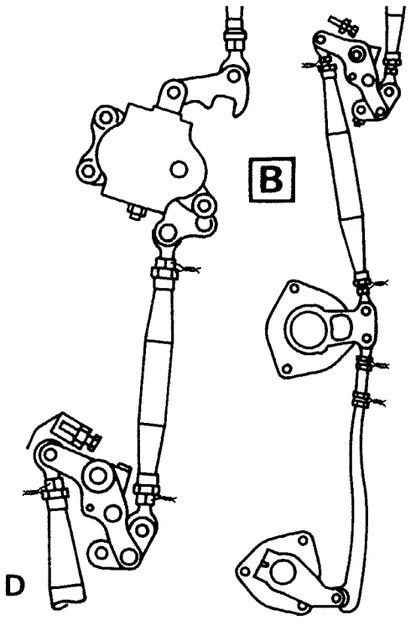




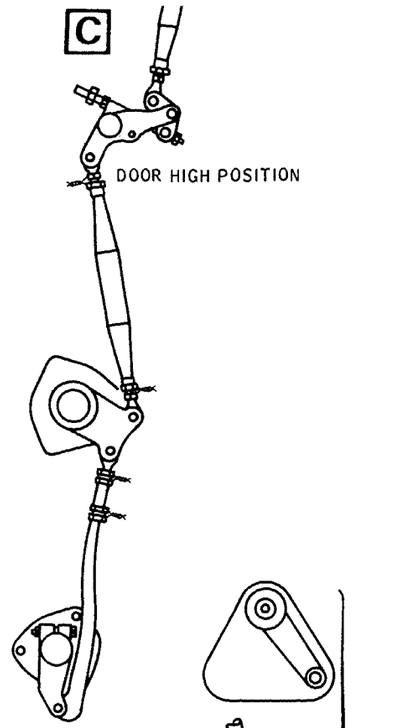


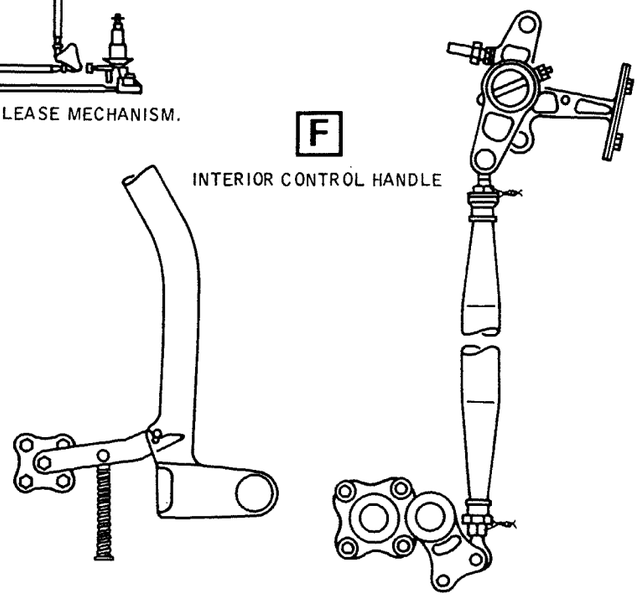
EMERGENCY ESCAPE SLIDE RELEASE MECHANISM.

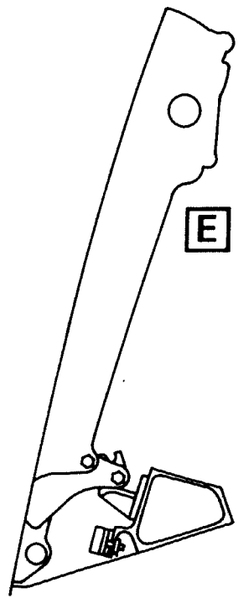




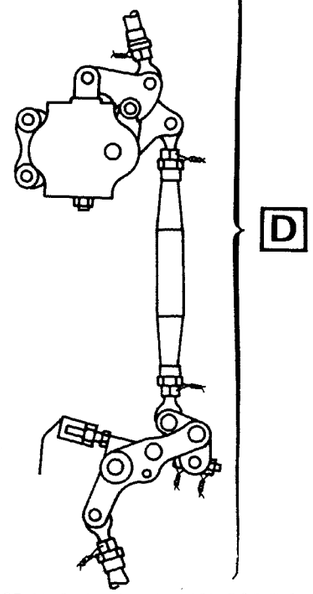
DOOR CLOSED POSITION







FLAP OF EXTERIOR CONTROL HANDLE



LOCKING OF DOOR MECHANISM. IN HIGH POSITION

BM3 52 10 00 5 ACM0

FWD and AFT Pass./Crew Doors
Internal Components
Figure 502

EFFECTIVITY: ALL

PIA

Printed in France

PASSENGER/CREW DOORS - CLEANING/PAINTING

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. General

A. For cleaning the structure or parts of door mechanism use only water-soluble cleaning agents.

B. Observe manufacturer's instructions for use and mixing ratios of cleaning agents.

2. Reason for the Job

Cleaning of passenger/crew doors and restoration of damaged paint surfaces.

3. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B.	Brush
C.	Abrasive Cloth (Alum. Oxide, grade 320)
D.	Synthetic Sponge
E.	Cleaning Cloth
F.	Compressed Air
G.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.025 in.)
H.	Spraying Equipment
J.	Adhesive Tape
K. Material No. 04-004	Common Greases (Ref. 20-31-00)
L. Material No. 05-027	Special Materials (Ref. 20-31-00)
M. Material No. 11-001	Cleaning Agents (Ref. 20-31-00)
N. Material No. 13-002	Pretreatment for Painting (Ref. 20-31-00)
O. Material No. 16-001	Structure Paints (Ref. 20-31-00)
P. Material No. 16-002	Structure Paints (Ref. 20-31-00)
Q. Material No. 16-005	Structure Paints (Ref. 20-31-00)
R. Material No. 16-006	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation

4. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTION MUST BE FOLLOWED.
(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
(4)Remove door lining and insulation (Ref. 52-10-13, P. Block 401).

B. Cleaning
(1)Remove loose chips and deposits with synthetic sponge.
(2)Mask moving parts such as bearings with adhesive tape or grease (Material No. 04-004).
(3)Clean door structure and corresponding parts of door mechanism with cleaning agent (Material No. 11-001).
NOTE : Use cleaning agents in accordance with manufacturer's instructions.
(4)Remove foreign objects from recesses and corners using a brush.
(5)Dry cleaned surfaces with cleaning cloth or compressed air.

C. Painting
(1)Remove corrosion with abrasive cloth and synthetic sponge.
(2)Clean repaired surfaces with cleaning agent (Material No. 11-001) and dry with clean cloth or compressed air.
(3)Apply Alodine 1200 (Material No. 13-002) or wash primer (Material No. 16-005) with clean cloth or brush.
(4)After a reaction time of two minutes, carefully rinse with cold water and dry immediately.
(5)Apply wash primer (Material No. 16-005), polyurethane primer (Material No. 16-001), chromate primer (Material No. 16-006) and polyurethane grey top coat (Material No. 16-002).(For special procedures refer to 51-75-10, P. Block 801 and manufacturers' instructions).

D. Close-Up
(1)Remove adhesive tape or grease.
(2)After cleaning, inspect self-adhesive labels for satisfactory condition.
(3)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(4)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(5)Make certain that drain holes are clean and free from obstruction.
(6)Install door lining and insulation (Ref. 52-10-13, P. Block 401).
(7)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(8)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(9)Close door.
(10)Remove access platform.

R PASSENGER/CREW DOORS - DEACTIVATION/REACTIVATION

R Ref. : MMEL Sect. 1-52, Item 2

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED CARRYING OUT MAINTENANCE
R ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. Block 301).

R 1. Deactivation

R A. Reason for the Job

R To make sure that the remaining stop fittings, the upper and lower guide
R fittings, the roller fittings and the door latches are in a serviceable
R condition.

R B. Equipment and Materials

R ITEM	DESIGNATION
R (1)	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)

R Referenced Procedures

R - 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
R - 52-10-11, P. Block 601	FWD and AFT Passenger/Crew Doors

C. Procedure
(1)Job Set-Up
(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED

(b)Safety emergency escape slide, door damper operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(2)Inspection

R ** ON FWD PASSENGER/CREW DOORS

R (a)Make sure that the upper and lower stop fitting pairs are not
R inoperative.

R ** ON AFT PASSENGER/CREW DOORS

R (a)Make sure that not more than one stop fitting is inoperative.

R ** ON ALL DOORS

R (b)Visually inspect the following components on the applicable passenger/crew door for scratches, marks and dents:
- the remaining stop fittings,
- the upper and lower guide fittings,

- the door latches,
- the guide rollers.

(c)If any damages occur, do a special inspection and take the given limits into consideration (Ref. 52-10-11, P. Block 601).

(3)Close-up

(a)Close door.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED

(b)Arm door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).

(c)Remove access platform.

2. Reactivation

A. Referenced Procedures

- 52-10-31, P. Block 401 FWD and AFT Door Latch and Stop Fittings

B. Procedure

(1)Replace the applicable door and the fuselage stop fitting (Ref. 52-10-31, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B. 98A52108007001	Tool Set - R/J AFT Passenger/Crew Doors
C. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
or 98A52108008001	Support Frame - Ballast Weight, Doors NOTE : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
D.	Measuring Tools
E.	Spring Balance
F.	Torque Wrench, 0 to 2.5 m.daN (0 to 225 lbf.in.)
G.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.025 in.)
H.	Steel Laminated Shims
J. Material No. 04-004A	Common Greases (Ref. 20-31-00)
K. Material No. 05-002	Special Materials (Ref. 20-31-00)
L. Material No. 05-027	Special Materials (Ref. 20-31-00)
M. Material No. 09-016	Sealants (Ref. 20-31-00)
N. Material No. 16-001	Structure Paints (Ref. 20-31-00)
P. Material No. 16-002	Structure Paints (Ref. 20-31-00)
Referenced Procedures	
- 25-23-41, P. Block 401	Door Frame Lining
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
R - 52-10-11, P. Block 601	FWD, AFT Passenger/Crew Doors
R - 52-10-12, P. Block 501	FWD, AFT Door Suspension
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-20, P. Block 501	FWD, AFT Door Locking Mechanism
- 52-10-31, P. Block 401	FWD, AFT Door Latch and Stop Fittings
- 52-11-12, P. Block 401	FWD Door Suspension
- 52-13-12, P. Block 401	AFT Door Suspension

2. Procedure

A. Adjustment of Upper and Lower Guide Fittings/Stop Fittings
(1)Job Set-Up
(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

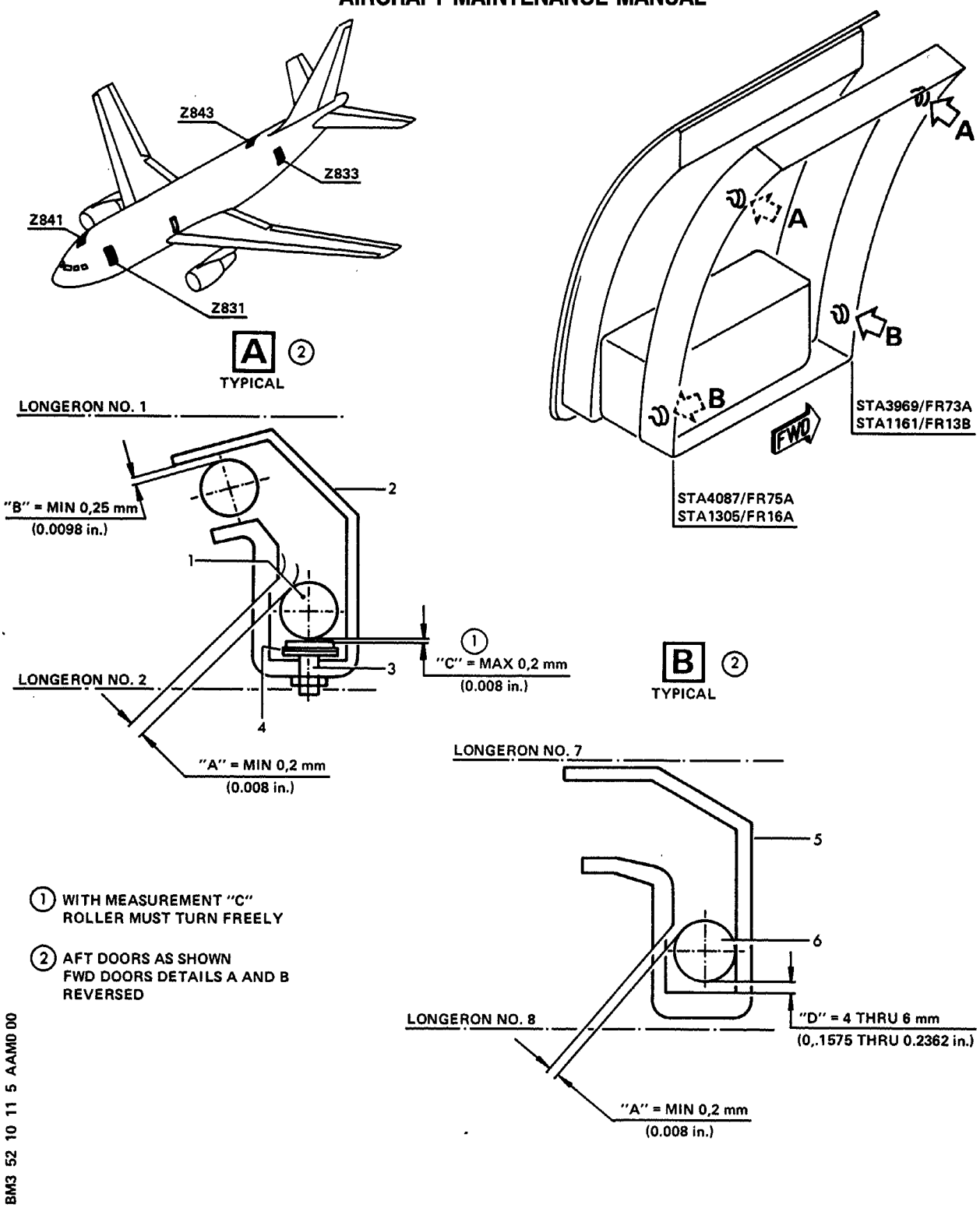
(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(c)Remove appropriate door frame linings (Ref. 25-23-41, P. Block 401).
(d)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401).
(e)Install ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(f)Open door.
(2)Adjustment
(Ref. Fig. 501)
(Ref. Fig. 502)
(Ref. Fig. 503)

** ON FWD PASSENGER/CREW DOORS

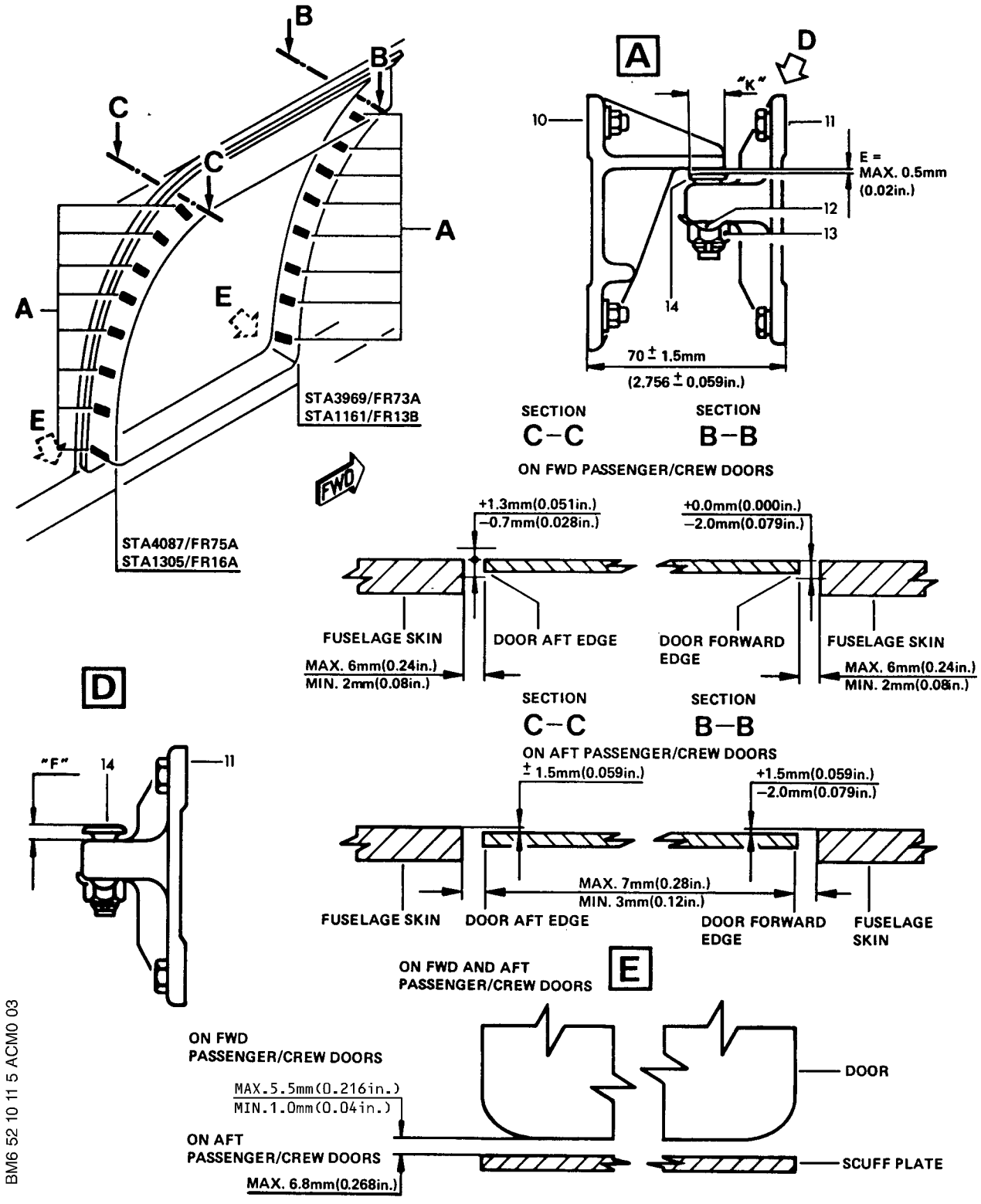
R (a)Check that gap between door structure and door frame LH and RH is 70 ±1,5 mm (2.756 ±0.059 in.).
R (b)If the gap between the door structure and door frame is out of limits, carry out adjustment of the support arm and and connection links (Ref. 52-10-12, P. Block 501).
R NOTE : Make sure that the bushes in the support arm have no excessive play. If necessary check diameter of bushes (Ref. 52-10-11, P. Block 601). Replace the bushes if necessary before you start the adjustment.
R (c)Check that dimension "K" between door frame stop fitting and stop bolt of door stop fitting is 12 +3 -1 mm (0.47 +0.118 -0.04 in.).
R (d)Check that gap 'E' at stop fittings (10),(11) is between 0 and 0.5 mm (0 and 0.02 in.).

NOTE : At least two stop fittings pairs on each side must be in contact. The aim should be that the top and bottom stop fitting pairs are in contact.

R (e)If less than two stop fitting pairs on each side are in contact, proceed as follows:
1 Open door.
NOTE : Mark relative position of serrations on plates (19),(20) and upper and lower guide fittings (2),(5) prior to adjustment.
2 Loosen nuts at upper and lower guide fittings (2),(5).
3 Move guide fittings (2),(5) on serrated plates (19),(20) outboard.
4 Fingertighten nuts at guide fittings (2),(5).

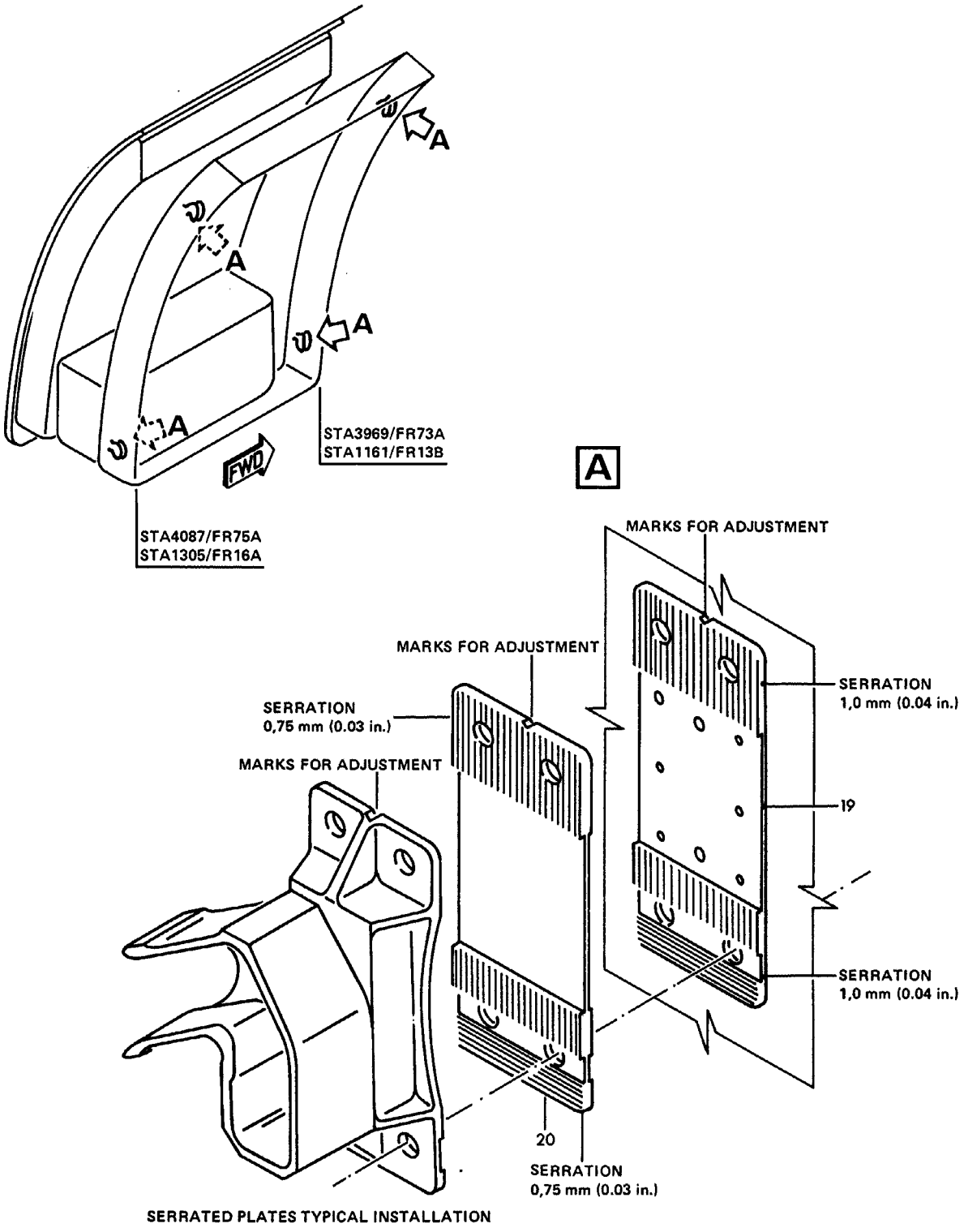


FWD and AFT Passenger/Crew Doors - Guide Fittings
Figure 501



FWD and AFT Passenger/Crew Doors - Stop Fittings and Skin Offset
Figure 502

R



FWD and AFT Passenger/Crew Doors - Guide Fittings
Figure 503

5 Close door and check requirement.
6 Repeat steps 1 thru 5 until requirement is obtained.
7 Check with feeler gage PN 98A52108007060 that gap "A" is reached otherwise adjust per steps 1 thru 6.
8 TORQUE nuts at guide fittings (2),(5) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
9 Close door.
10 Check that the following conditions exist at door stop fittings (11):
a With door/fuselage flush to within the tolerances shown, at least two fuselage stop fittings (10) on each side must contact bolts (14).
b Where fuselage stop fittings (10) do not contact bolts (14), gaps "E" must be within tolerances.
c A longitudinal gap of min. 1.0 mm (0.04 in.) exists between bottom of door and scuff plate for the complete length of door.
d Where a longitudinal gap does not exist, carry out adjustment of door closed position (Ref. 52-10-20, P. Block 501).
11 When an insufficient number of fuselage stop fittings (10) is in contact or gaps "E" are out of tolerance, proceed as follows:
a Open door.
b Release locking plate (12) and remove nut (13) and locking plate (12).
c Close door.
d Adjust bolt (14) to a minimum of gap "E".
e Make certain that dimension "F" is not more than 6 mm (0.2362 in.) for the 14 lower door stop fittings and 5.5 mm (0.2165 in.) for the two upper door stop fittings.
NOTE : If dimension "F" is exceeded, all stop bolts (14) must be reset to the basic setting in accordance with 52-10-31, P. Block 401, Adjustable Bolts for Door Stop Fittings.
f Install new locking plate (12) and nut (13).
g TORQUE nut (13) to between 2.0 and 2.2 m.daN (177 and 196 lbf.in.) and secure with locking plate (12).

(f)Not applicable

R (g)Adjust clearance of min. 0.2 mm (0.008 in.) between bolt (14) of door stop fittings (11) and fuselage stop fittings (10) during closing of the door at the beginning of stop fitting overlapping (Ref. steps (e)1 thru (e)11).

R (h)Check that gaps "A" are reached, otherwise adjust per steps (e)1 thru (e)7.

R (j)Adjust for smooth engagement of guide rollers (1),(6) and guide fittings (2),(5) as follows:
R 1 Open door.
R 2 Remove stop (3) and adjustment washers (4).
R 3 Reinstall stop (3).
R 4 Close door and keep in "high" position.
R 5 Loosen nuts at guide fittings (2),(5) and move guide fittings (2),(5) on serrated plates (19),(20) to obtain gap "B".
R NOTE : Avoid movement of guide fitting on serrated plate in outboard/inboard direction.
R 6 Fingertighten nuts at guide fittings (2),(5) and open door.
R 7 TORQUE nuts at guide fittings (2),(5) to between 0.45 and 0.5 m.daN

R (40 and 44 lbf.in.).
R 8 Adjust stop (3) according to steps (j)1 thru (j)5.
(k)Adjust gap "D" between guide rollers (6) and guide fittings (5) as follows:
1 Open door and loosen nuts at guide fittings (5) until fingertight. Close door.
2 Loosen nuts at guide fittings (5) and move guide fittings (5) on serrated plates (19),(20) to obtain gap "D".
NOTE : 1. Mark relative position of serrations on plates (19),(20) and guide fittings (5) prior to adjustment.
2. Avoid movement of guide fittings (5) on serrated plates (19),(20) in inboard/outboard direction.
3 If gap "A" is out of tolerance, reduce gap "D" until gap "A" is obtained.
4 Fingertighten nuts at guide fittings (5) and open door.
5 TORQUE nuts at guide fittings (5) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(l)Adjust gaps "C" between guide rollers (1) and stops (3) as follows:
1 Open door.
2 Remove stops (3) and adjustment washers (4).
3 Refit stops (3) only.
4 Close door.
5 Measure gaps "C" between guide rollers (1) and stops (3) and record.
6 Open door.
7 Remove stops (3) and reinstall with adjustment washers (4) of appropriate thickness minus 0.1 thru 0.2 mm (0.004 thru 0.008 in.) selected according to measurement recorded in step (l)5. TORQUE nut of stops (3) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(m)Adjust door latches (Ref. Para. 3.B).
(n)Check and adjust girt bar fittings (Ref. Para. 3.C).

** ON AFT PASSENGER/CREW DOORS

(p)Check that gap between door structure and door frame LH and RH is 70 ±1,5mm (2.756 ±0.059 in.).
(q)If the gap between the door structure and door frame is out of limits, carry out adjustment of the support arm and and connection links (Ref. 52-10-12, P. Block 501).
NOTE : Make sure that the bushes in the support arm have no excessive play. If necessary check diameter of bushes (Ref. 52-10-11, P. Block 601). Replace the bushes if necessary before you start the adjustment.
(r)Check that dimension "K" between door frame stop fitting and stop bolt of door stop fitting is 12 +2 -1 mm (0.47 +0.08 -0.04 in.).
(s)Check that gap "E" at stop fittings (10),(11) is between 0 and 0.5 mm (0 and 0.02 in.).

NOTE : At least two stop fitting pairs on each side must be in contact. The aim should be to have the top and bottom stop fitting pairs in contact.

(t)If less than two stop fittings on each side are in contact, proceed as follows:
1 Open door.
NOTE : Mark relative position of serrations on plates (19),(20) and guide fittings (2),(5) prior to adjustment.
2 Loosen nuts at guide fittings (2),(5).
3 Move guide fittings (2),(5) on serrated plates (19),(20) outboard.
4 Fingertighten nuts at guide fittings (2),(5).
5 Close door and check requirement.
6 Repeat steps 1 thru 5 until requirement is obtained.
7 Check with feeler gage PN 98A52108007060 that gap "A" is reached, otherwise adjust per steps 1 thru 6.
8 TORQUE nuts at guide fittings (2),(5) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
9 Close door.
10 Check that the following conditions exist at door stop fittings (11):
a With door/fuselage flush to within the tolerances shown, two stop fittings (10) on each side must contact bolts (14).
b Where fuselage stop fittings (10) do not contact bolts (14), gap "E" must be within tolerances.
c A longitudinal gap of max. 6.8 mm (0.27 in.) exists between bottom of door and scuff plate for the complete length of door. Make certain that door does not touch scuff plate.
d Where a longitudinal gap does not exist, carry out adjustment of door closed position (Ref. 52-10-20, P. Block 501).
11 When an insufficient number of fuselage stop fittings (10) is in contact or gaps "E" are out of tolerance, proceed as follows:
a Open door.
b Release locking plate (12) and remove nut (13) and locking plate (12).
c Close door.
d Adjust bolt (14) to a minimum of gap "E".
e Make certain that dimension "F" is not more than 6 mm (0.2362 in.).
NOTE : If dimension "F" exceeds 6 mm (0.2362 in.), all stop bolts (14) must be reset to the basic setting in accordance with 52-10-31, P. Block 401, Adjustable Bolts for Door Stop Fittings.
f Install new locking plate (12) and nut (13).
g TORQUE nut (13) to between 2.0 and 2.2 m.daN (177 and 196 lbf.in.) and secure with locking plate (12).

(u)Adjust clearance of min. 0.2 mm (0.008 in.) between bolts (14) of door stop fittings (11) and fuselage stop fittings (10) during closing of the door at the beginning of stop fitting overlapping (Ref. steps (t)1 thru 11).

(v)Check that gaps "A" are reached, otherwise adjust per steps (t)1 thru 7.

(w)Adjust for smooth engagement of guide rollers (1),(6) and guide fittings (2),(5) as follows:
1 Open door.
2 Remove stop (3) and adjustment washers (4).
3 Reinstall stop (3).

4 Loosen nuts at guide fittings (2),(5) and move guide fittings (2),(5) on serrated plates (19),(20) to obtain gap "B".
5 Fingertighten nuts at guide fittings (2),(5).
6 Close door and keep in "high" position and check smooth engagement of guide rollers (1),(6) in guide fittings (2),(5).
7 TORQUE nuts at guide fittings (2),(5) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
8 Adjust stop (3) according to steps (y)1 thru 7.

(x)Adjust gap "D" between guide rollers (6) and guide fittings (5) as follows:
1 Open door.
2 Loosen nuts at guide fittings (5) and move guide fittings (5) on serrated plates (19),(20) to obtain gap "D".
3 Fingertighten nuts at guide fittings (5).
4 Close door and check gap "D".
5 Repeat steps 1 thru 4 until gap "D" is obtained.
6 TORQUE nuts at guide fittings (5) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).

(y)Adjust gap "C" between guide rollers (1) and stop (3) as follows:
1 Open door.
2 Remove stops (3) and adjustment washers (4).
3 Refit stops (3) only.
4 Close door.
5 Measure gaps "C" between guide rollers (1) and stops (3) and record.
6 Open door.
7 Remove stops (3) and reinstall with adjustment washers (4) of appropriate thickness minus 0.1 thru 0.2 mm (0.004 thru 0.008 in.) selected according to measurement recorded in step (y)
8 TORQUE nut of stops (3) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).

(z)Adjust door latches (Ref. Para. 3.B).
(aa)Check and adjust girt bar fittings (Ref. Para. 3.C).

** ON FWD AND AFT PASSENGER/CREW DOORS

(3)Test
(a)Close door and observe smooth door closing.
(4)Close-Up
(a)Coat projecting thread ends and bolt heads as follows:
1 For bolts attaching parts directly to door structure use polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
2 For bolts in mechanism use Mastinox (Material No. 05-002).
(b)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(c)Install appropriate door frame linings (Ref. 25-23-41, P. Block 401).
(d)Remove ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(e)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(f)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(g)Close door.
(h)Remove access platform.

B. Adjustment of Door Latches
(1)Job Set-Up
(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(c)Open door.
(d)Remove guide arm lining (Ref. 52-10-13, P. Block 401).
(2)Adjustment
(Ref. Fig. 504)
(Ref. Fig. 505)
(Ref. Fig. 506)

** ON FWD PASSENGER/CREW DOORS

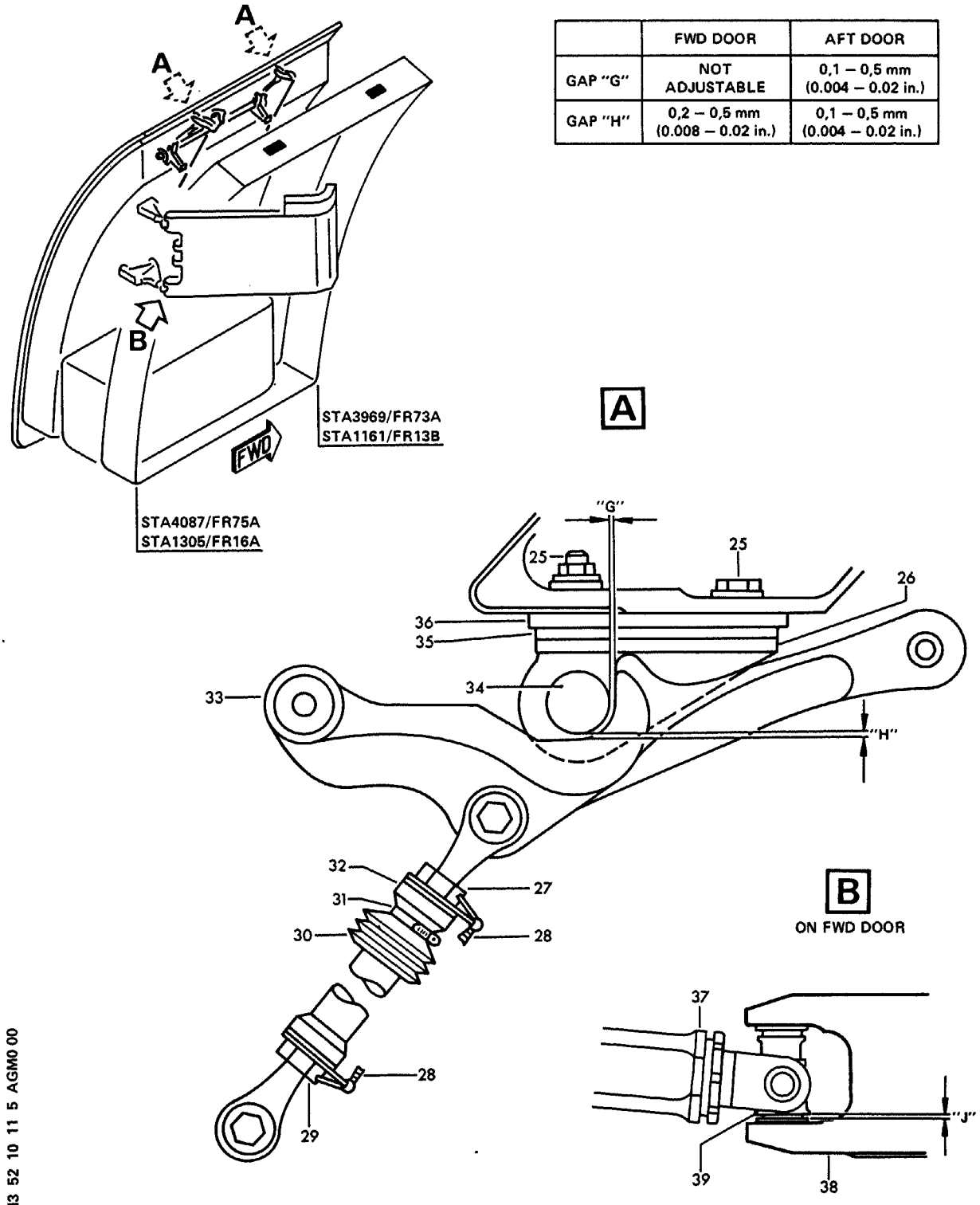
(a)Close door and check clearance between door latches (33) and rollers (34) at "H" (feeler gages PN 98A52108007061 and standard feeler gage 0.2 mm (0.008 in.). If clearance is not correct, carry out steps (2)(b) thru (l).

NOTE : Gap "G" is not adjustable.

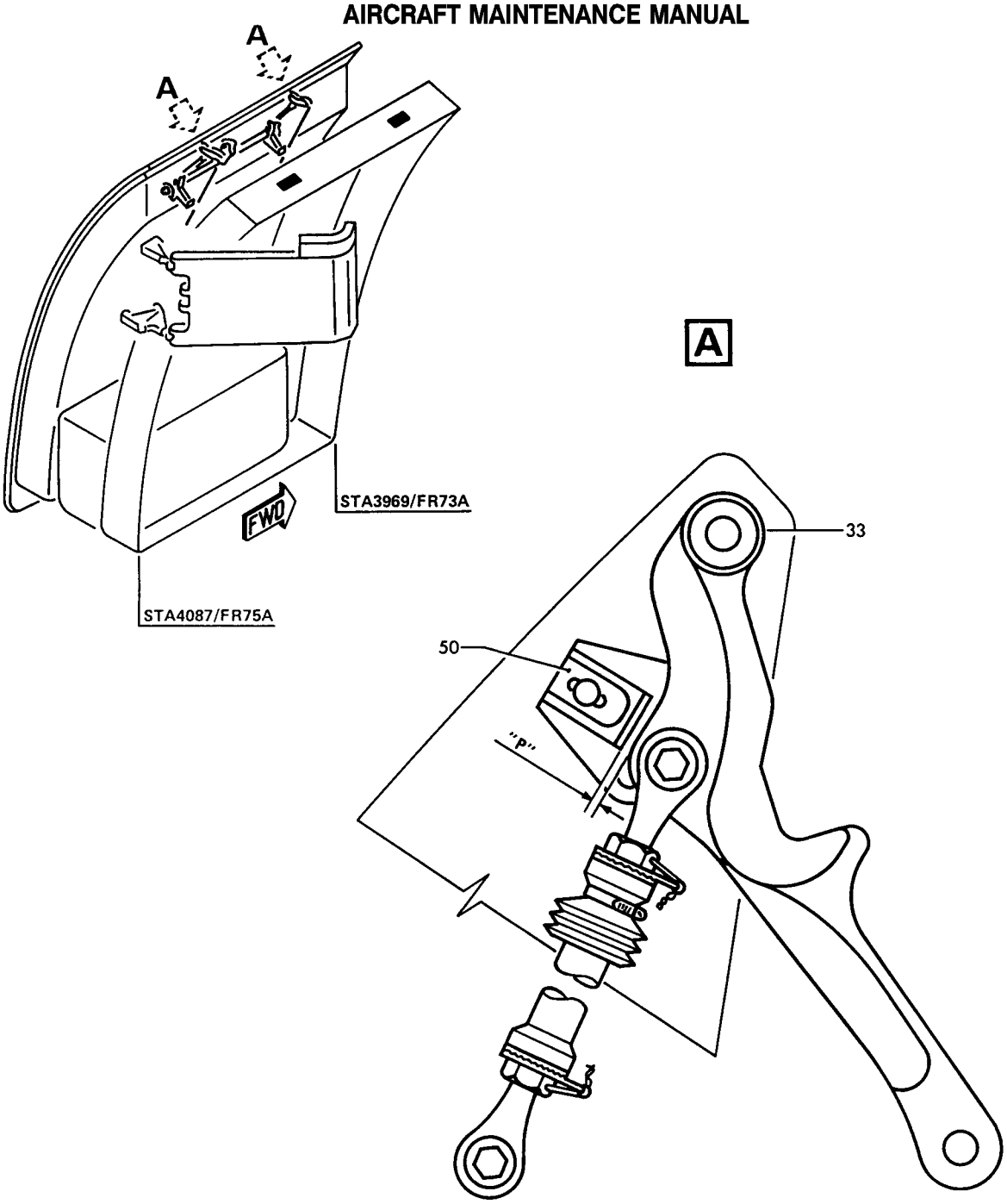
(b)Open door.
(c)Remove door upper lining (Ref. 52-10-13, P. Block 401).
(d)Remove lockwires (28).
(e)Loosen nuts (27),(29).
(f)Close door after inserting shims of 0.2 mm (0.008 in.) thickness between stops (3) in lower guide fittings (2) and rollers (1).
(g)With door closed, make sure that clearance between upper part of roller fittings and lifting shaft rollers is between 0 and 0.1 mm (0 and 0.004 in.).
(h)Turn rod (32) in counterclockwise direction until door latches (33) contact rollers (34).
(i)Check that clearance "J" is 0.04 mm (0.0016 in.) between bearing journal (39) and lower part of support arm (38) lower fork.
(j)Tighten nuts (27),(29) and secure with lockwires (28).
(k)Open door and remove shims from lower guide fittings (2).
(l)Close door; with door in "high" position check that clearance between upper part of roller fittings and lifting shaft rollers is between 0 and 0.4 mm (0 and 0.016 in.)

** ON AFT PASSENGER/CREW DOORS

	FWD DOOR	AFT DOOR
GAP "G"	NOT ADJUSTABLE	0,1 – 0,5 mm (0.004 – 0.02 in.)
GAP "H"	0,2 – 0,5 mm (0.008 – 0.02 in.)	0,1 – 0,5 mm (0.004 – 0.02 in.)

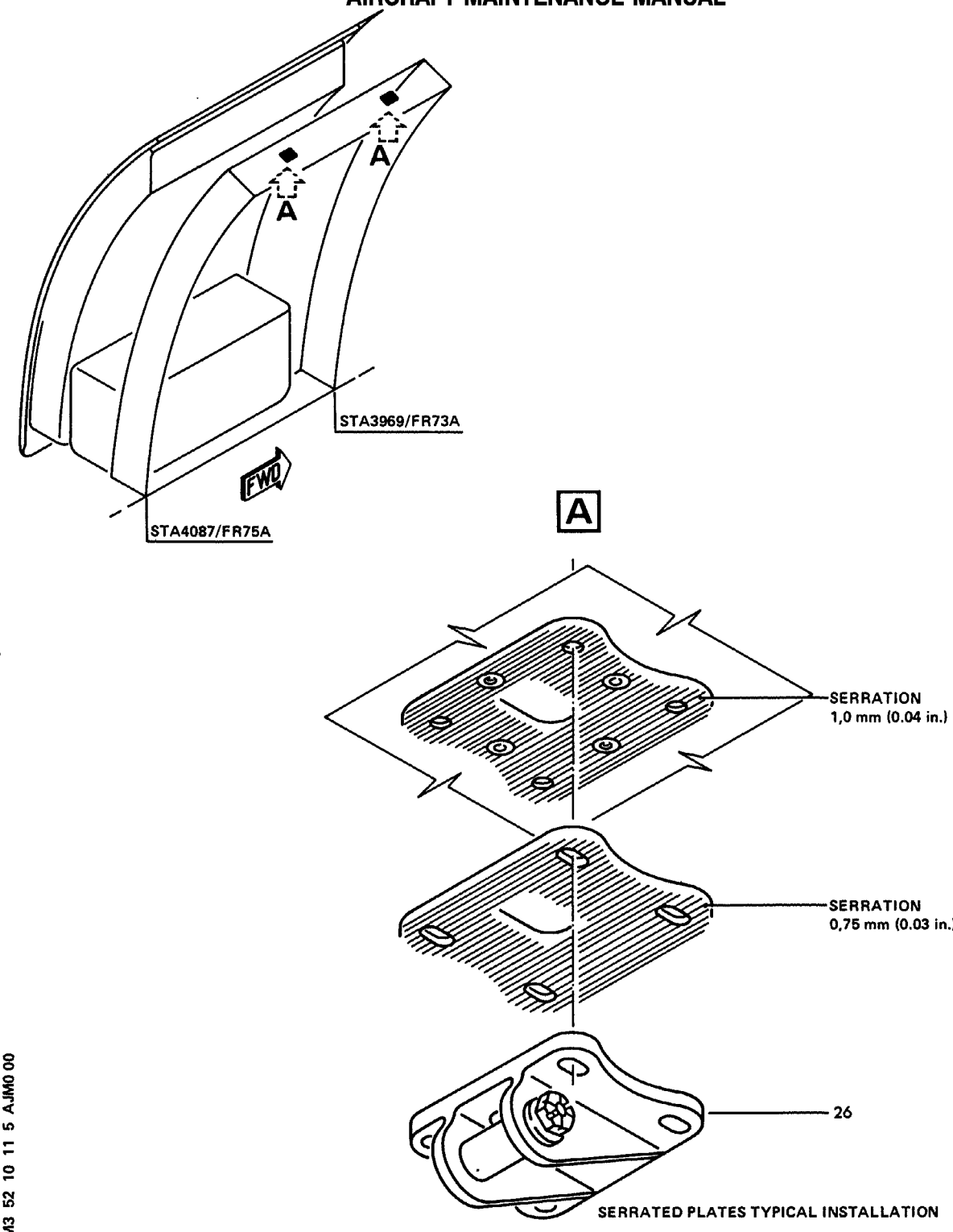


FWD and AFT Passenger/Crew Doors - Door Latches
Figure 504



BM6 52 10 11 5 AHM0 00

AFT Passenger/Crew Doors -
Door Latches and Stop Brackets
Figure 505



AFT Passenger/Crew Doors - Door Latch Fittings
Figure 506

(a)Close door and check gaps "G" and "H" with feeler gages PN 98A52108007061 and 98A52108007062 between door latches (33) and rollers (34).
(b)Keep AFT passenger/crew doors in "high" position and check that clearance "P" between door latches (33) and stop brackets (50) is between 0.8 and 1.5 mm (0.031 and 0.059 in.).
(c)Open door.
(d)Loosen screws (25) and push latch fittings (26) to their most outboard position.
(e)Remove door upper lining (Ref. 52-10-13, P. Block 401).
(f)Loosen clamps (31) from gaiter (30).

(g)Cut and remove lockwire (28).
(h)Loosen nuts (27),(29) and turn rods (32) clockwise.
(i)Adjust horizontal gaps "G".
1 Close door.
2 Insert feeler gage PN 98A52108007061, min 0.5 mm (0.02 in.).
3 Adjust both latch fittings (26) on serrated plates (35),(36).
4 Fingertighten screws (25).
5 Open door.
6 TORQUE screws (25) to 0.45 thru 0.5 m.daN (40 thru 44 lbf.in.).
(j)Adjust vertical gaps "H".
1 Close door.
2 Insert feeler gage PN 98A52108007061, min 0.5 mm (0.02 in.).
3 Adjust door latches (33) by turning rods (32) in counterclockwise direction.
4 Keep AFT passenger/crew doors in "high" position and make sure that clearance "P" between door latches (33) and stop brackets (50) is between 0.8 and 1.5 mm (0.031 and 0.059 in.).
5 Tighten nuts (27),(29) and secure with lockwire (28).
(k)Tighten clamps (31) on gaiter (30).

** ON FWD AND AFT PASSENGER/CREW DOORS

(3)Test
(a)Close door and observe the following:
1 Smooth door closing.
2 Door warning lights off.
(4)Close-Up
(a)Coat projecting thread ends and bolt heads as follows:
1 For bolts attaching parts directly to door structure use polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
2 For bolts in mechanism use Mastinox (Material No. 05-002).
(b)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(c)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(d)Install door lining (Ref. 52-10-13, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(e)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(f)Close door.
(g)Remove access platform.

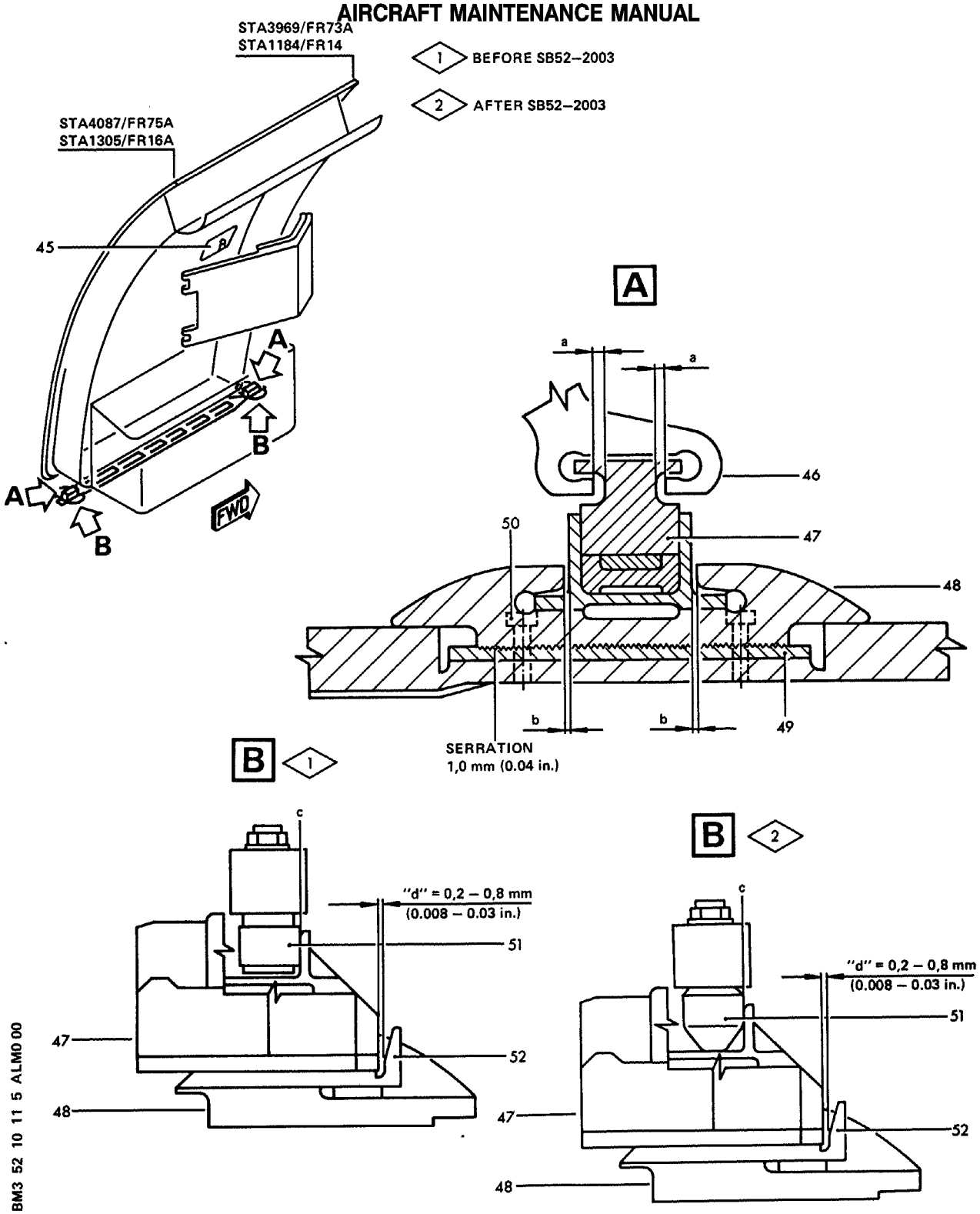
C. Adjustment of Girt Bar Fittings
(1)Job Set-Up
(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(c)Open door.
(d)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401 or container with slide/raft (Ref. 25-61-22, P. Block 401).
(e)Install ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(2)Adjustment
(Ref. Fig. 507)
(a)Close door.
(b)Move emergency control handle (45) from fully aft position to fully forward position and back to fully aft position. Handle force in each direction must not exceed max. 10 daN (22 lbf.).
R (c)If the handle force more than the limit or the girt bar fitting
R has been replaced, proceed as follows:
1 Set emergency control handle (45) to intermediate position.
2 Center slider (47) in jaw (46) so that gaps "a - a" are equal.
(d)Set emergency control handle (45) to fully aft position.
(f)Open door.
(e)Sufficiently loosen girt bar fitting (48), screws (50) and adjust on serrated plate (49) until equal gaps "b - b" exist between slider (47) and girt bar fitting (48).
(f)TORQUE screws (50) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(g)Repeat steps (c) and (d) and then recheck gaps "b - b".
(h)Close door and set emergency control handle (45) to fully forward position.

** ON DOORS SERIAL NOS. 1201, 1224-1241

(i)Push back sliders (47) to contact roller (51) face "c" and check gaps "d" between sliders (47) and stops (52) of girt bar fittings (48). If gaps "d" are out of tolerance, proceed as follows:
1 Set emergency control handle (45) to fully aft position and open door.
2 Sufficiently loosen girt bar fittings (48) using screws (50) to ensure movement of girt bar fitting (48) without changing position on serrated plates (49).
3 Move forward girt bar fitting (48) to its most forward position and aft girt bar fitting (48) to its most aft position.
(k)Close door and set emergency control handle (45) to fully forward position.
(l)Adjust gaps "d".
NOTE : Push back sliders (47) to be in contact with roller (51) face "c".



FWD and AFT Passenger/Crew Doors -
Girt Bar Fittings
Figure 507

** ON DOORS SERIAL NOS. 1162, 1172, 1191, 1245 AND SUBSEQUENT
AFTER SB 52-2003 DOORS SERIAL NOS. 1201, 1224-1241

(m)Push back sliders (47) to contact conical pin (51) face "c" and check gaps "d" between sliders (47) and stops (52) of girt bar fittings (48). If gaps "d" are out of tolerance, proceed as follows:
1 Set emergency control handle (45) to fully aft position and open door.
2 Sufficiently loosen girt bar fittings (48) using screws (50) to ensure movement of girt bar fitting (48) without changing position on serrated plates (49).
3 Move forward girt bar fitting (48) to its most forward position and aft girt bar fitting (48) to its most aft position.
(n)Close door and set emergency control handle (45) to fully forward position.
(o)Adjust gaps "d".
NOTE : Push back sliders (47) to be in contact with conical pin (51) face "c".

** ON DOOR SERIAL NOS. ALL

(p)Set emergency control handle (45) to fully aft position and open door.
(q)TORQUE screws (50) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(r)Coat projecting thread ends and bolt heads with polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
(s)Apply sealant (Material No. 09-016) around girt bar fitting (48)/ structure contact area to form seal.
(t)Apply grease (Material No. 04-004A) to girt bar ends.
(3)Test
(a)Close door and observe the following:
1 Smooth door closing.
2 Check that force required to operate emergency control handle (35) is not greater than 10 daN (22 lbf.).
3 Free movement of emergency control handle (45).
4 Engagement of sliders (47) in girt bar fittings (48).
(4)Close-Up
(a)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(b)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(c)Make certain that drain holes are clean and free from obstructions.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

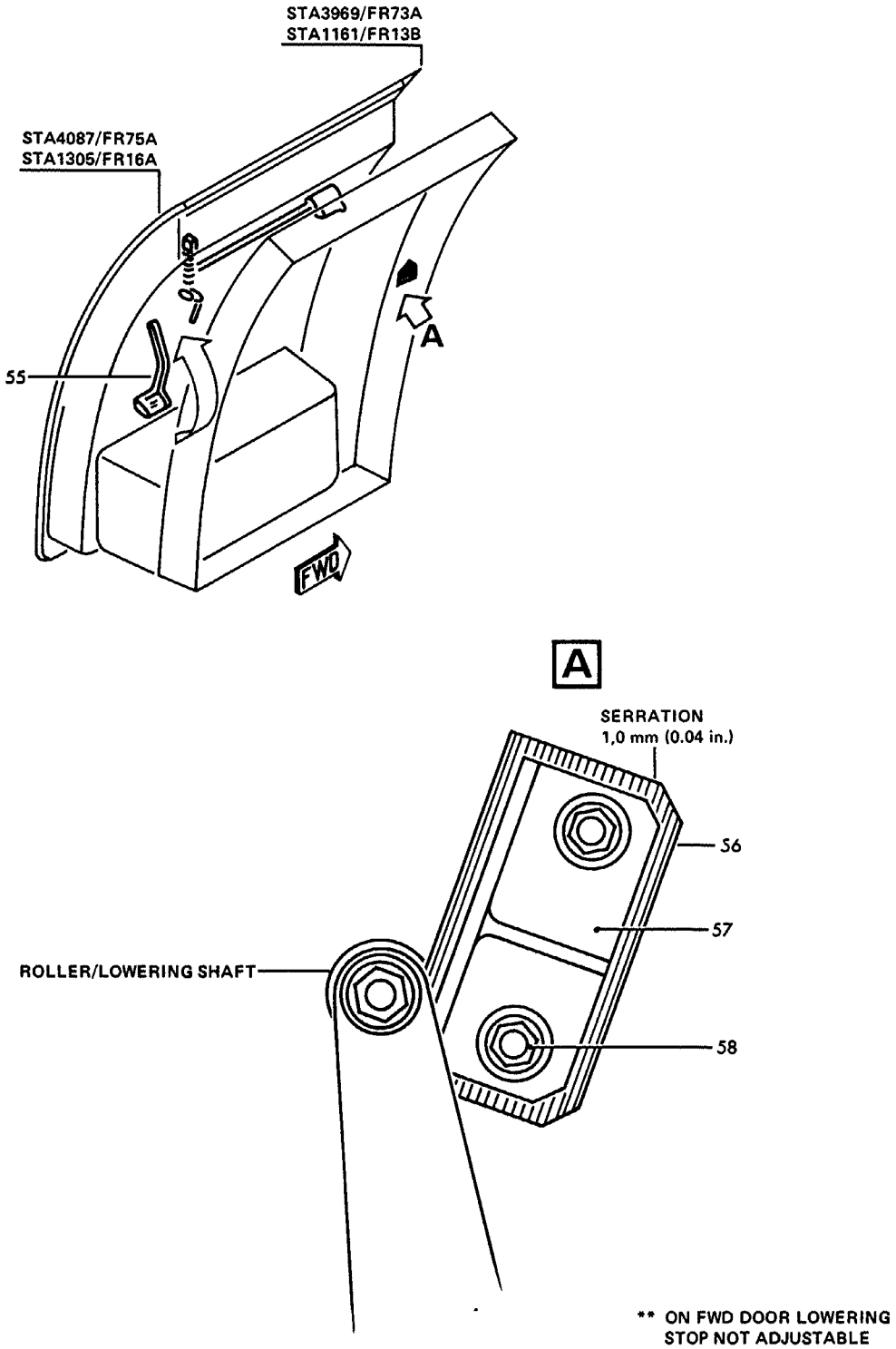
(d)Remove ballast weight assy PN 98A52108008001.
(e)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(f)Install container with dual escape slide (Ref. 25-61-21, P. Block 401) or with slide/raft (Ref. 25-61-22, P. Block 401).

(g)Close door.
(h)Remove access platform.

D. Adjustment of Lowering Stop
(Ref. Fig. 508)

** ON AFT PASSENGER/CREW DOORS

(1)Job Set-Up
(a)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(c)Open door.
(d)Remove guide arm lining (Ref. 52-10-13, P. Block 401).
(e)Remove appropriate door frame linings (Ref. 25-23-41, P. Block 401).
(2)Adjustment
(a)Loosen nuts (58) and adjust lowering stop (57) on serrated plate (56) inboard.
(b)Finger-tighten nuts (58).
(c)Close door against lowering stop (57) and check that it is possible to lower door as follows:
1 Lower door, and during lowering action press door outwards checking at the same time that lowering action is smooth over first third of travel.
(d)If operation per step (c) is not satisfied, proceed as follows:
1 Open door.
2 Loosen nuts (58) and adjust lowering stop (57) on serrated plate (56) outboard.
3 Finger-tighten nuts (58).
4 Repeat step (c).
(e)Open door to "high" position and during following outboard movement of door try to move interior control handle (55) downwards.
(f)If interior control handle (55) moves downward, repeat steps (a) thru (e).
(g)TORQUE nuts (58) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(h)Coat projecting thread ends and bolt heads with polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
(3)Test
(a)Close door and observe smooth door closing.
(4)Close-Up
(a)Open door and lock in open position.
(b)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(c)Install guide arm lining (Ref. 52-10-13, P. Block 401).
(d)Install appropriate door frame linings (Ref. 25-23-41, P. Block 401).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(e)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(f)Close door.
(g)Remove access platform.



BM3 52 10 11 5 ANM0 00

AFT Passenger/Crew Doors - Lowering Stop
Figure 508

** ON FWD AND AFT PASSENGER/CREW DOORS

E. Adjustment of Compensation Mechanism
(1)Job Set-Up
(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(c)Open door.
(d)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. (Ref. 25-61-22, P. Block 401).
(e)Install ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(2)Adjustment
(Ref. Fig. 509)

** ON FWD PASSENGER/CREW DOORS

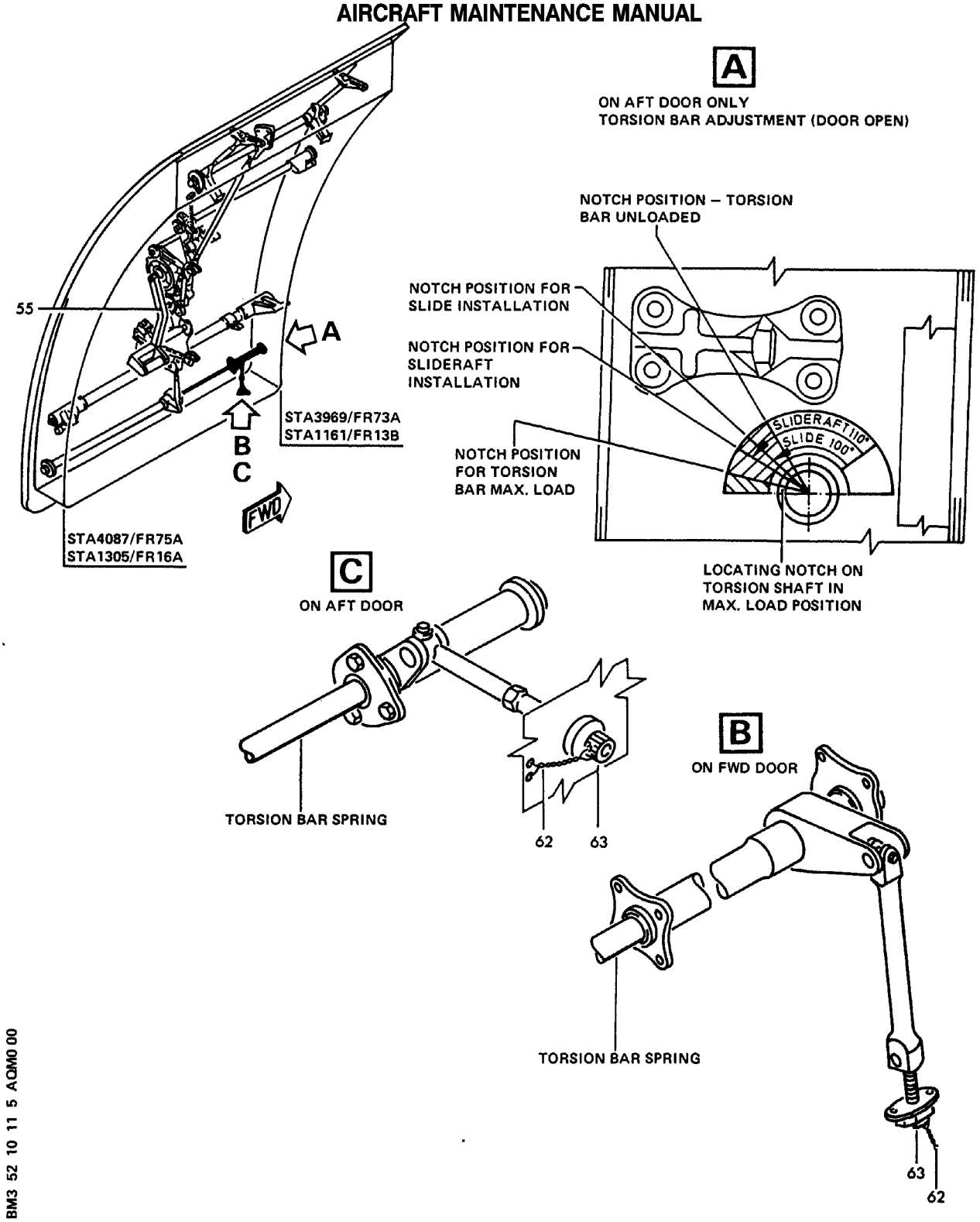
(a)Cut and remove lockwire (62).
(b)Tighten tension bolt (63) until a force of max. 16 daN (36 lbf.) is measured at interior control handle (55) during opening and closing and the difference between the forces required to lift and lower the door is not greater than 4 daN (9 lbf.). Turning tension bolt (63) clockwise (when viewed on top of bolt head) increases the force on the interior control handle.

NOTE : Measure force with a spring balance.

(c)Secure tension bolt (63) with lockwire (62).

**ON AFT PASSENGER/CREW DOORS

(a)Make certain that torsion indicator placard is correctly installed,
(b)If not, proceed as follows:
1 Lower AFT passenger/crew door.
2 Cut and remove lockwire (62).
3 Loosen tension bolt (63) to release force of torsion bar spring.
4 Clean area of torsion indicator placard at door frame.
5 Install torsion indicator placard so that the location notch is aligned with the torsion bar unloaded mark (door lowered).
(c)If, required, cut and remove lockwire (62).
(d)Adjust tension bolt (63) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator placard. Check that force measured at interior control handle (55) is max. 16 daN (36 lbf.) during opening and closing and the difference between the forces required to lift and lower the door is not greater than 4 daN (9 lbf.). Correct as necessary within the green area on the torsion indicator



FWD and AFT Passenger/Crew Doors
Compensation Mechanism
Figure 509

placard.

NOTE : Measure force with a spring balance.

(e)Secure tension bolt (63) with lockwire (62).

** ON FWD AND AFT PASSENGER/CREW DOORS

(3)Test
(a)Close door and observe the following:
1 No chafing of door lining.
2 Smooth door closing.
3 Check that force required to operate interior control handle is not greater than 16 daN (36 lbf.).
4 Check that force required to operate emergency control handle is not greater than 10 daN (22 lbf.).
(4)Close-Up
(a)Open door and lock in open position.
(b)Coat projecting thread ends and bolt heads with polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
(c)Remove ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(d)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(e)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(f)Make certain that drain holes are clean and free from obstructions.
(g)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(h)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(j)Close door.
(k)Remove access platform.

F. Adjustment of Door Buffer
(1)Job Set-Up
(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(c)Open door.
(d)Remove upper support arm lining (Ref. 52-10-13, P. Block 401).
(2)Adjustment

(Ref. Fig. 510)

(a)Inspect door stay mechanism as follows:

1 Remove cotter pin (81) and nut (80).

2 Remove washers (82),(79).

3 Remove bolt (74) with washer (75) and buffer (73) and support washer (72).

4 Close door and then open slowly and make certain that door stay mechanism is locked.

5 If not, replace door stay mechanism
(Ref. 52-11-12, P. Block 401, FWD Passenger/Crew Doors)
(Ref. 52-13-12, P. Block 401, AFT Passenger/Crew Doors).

(b)Adjustment of door buffer

1 With door open and door stay mechanism locked, pull door in closed direction and then measure and record gap "M".

2 Remove guide bushes (76),(83), washers (84),(71) and washers (77) for adjustment from stop support (70).

3 Select washers (78) to equal gap "M".

4 Install adjustment washers (78), guide bushes (76),(83) and washers (84),(71).

5 Install support washer (72), buffer (73), washer (75), bolt (74), washers (79),(82) and nut (80).

6 TORQUE nut (80) to max. 1.0 m.daN (89 lbf.in.) and back off nut (80) to next cotter pin hole.

7 Check gap "M" in accordance with step (b)1.

8 If gap "M" is not obtained, change adjustment washers (78), repeat steps (a)1 thru (a)3 and (b)2 thru (b)7.

9 Secure nut (80) with cotter pin (81).

(3)Test

Not applicable.

(4)Close-Up

(a)Open door and lock in open position.

(b)Coat projecting thread ends and bolt heads with polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).

(c)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

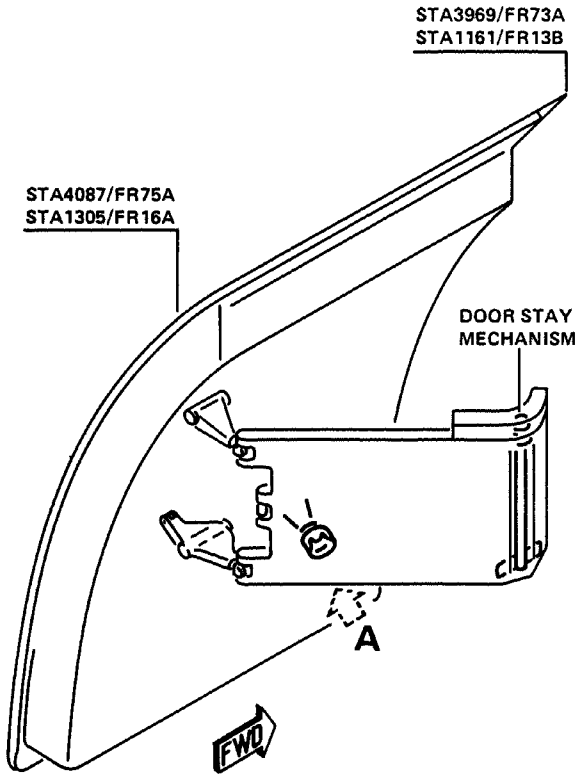
(d)Install upper support arm lining (Ref. 52-10-13, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(e)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).

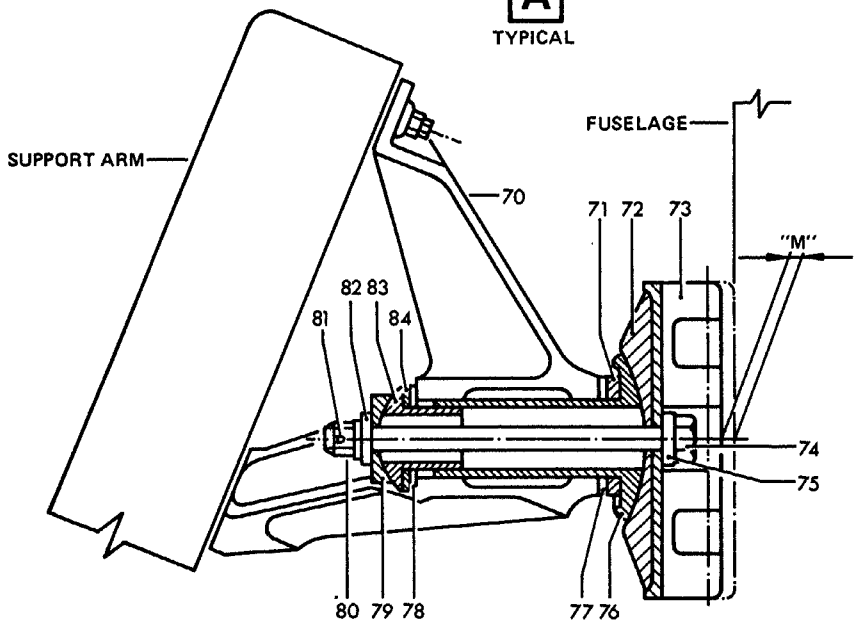
(f)Close door.

(g)Remove access platform.



	FWD DOOR	AFT DOOR
GAP "M"	1,0 – 1,5 mm (0.039 – 0.059 in.)	1,0 – 3,0 mm (0.039 – 0.118 in.)

A
TYPICAL



BM3 52 10 11 5 ASM0 00

FWD and AFT Passenger/Crew Doors - Door Buffer
Figure 510

G. Functional Test

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).

ACTION	RESULT
1. Attach spring balance to interior control handle and lift door.	The force required to lift the door does not exceed 16 daN (36 lbf.).
2. Attach spring balance to interior control handle and lower door.	The force required to lower the door does not exceed 16 daN (36 lbf.). The difference between the forces required to lift and lower the door does not exceed ON FWD DOORS 9 daN (20 lbf.) and ON AFT DOORS 4 daN (9 lbf.).

NOTE : In steps 1 and 2 the value 16 daN (36 lbf.) is only applicable after overhaul/new door installation. The value may be 20 daN (44 lbf.) after one inspection period.

3. Place door in "high closed" position, move it outwards until the guide rollers have left the guide fittings and load interior control handle 10 daN (22 lbf.) in downwards direction.	Interior control handle is locked in open position.
4. Place door in "high closed" position.	Emergency control handle is blocked in fully aft position.
5. Open door sufficiently to clear the fuselage and turn lowering shaft by hand until stop is reached.	Door remains in high position.
6. Close and lock door.	Interior control handle stays in locked position.
7. Move interior control handle inwards 14 mm (0.55 in.) from its normal locked position, measured at the handle bar.	Dividing lines between red and green sectors are visible in aperture of locking indicators.
8. Close and lock door.	

ACTION	RESULT
9. Mark a horizontal line on door and door frame skin, approx 180 mm (7 in.) from lower edge of door, with a pencil.	
10. Using interior control handle, place door in "high closed" position.	Door is lifted: on FWD doors 45 mm (1.77 in.) minimum on AFT doors 48 mm (1.89 in.) minimum.
11. Lower door and then place the door in "high closed" position using the exterior control handle.	Door is lifted: on FWD doors 45 mm (1.77 in.) minimum, on AFT doors 48 mm (1.89 in.) minimum.
12. Repeat steps 10 and 11 several times, then close and lock door.	Horizontal pencil line is in line ±1.0 mm (0.039 in.) maximum.
13. Safety door damper and emergency operation cylinder (Ref. 52-10-00, P. Block 301).	
14. Close door and remove safety pin for emergency control handle.	
15. Set emergency control handle to fully forward position.	The slides of the emergency slide rails freely engage in the door frame side fittings.
16. Lift door with exterior control handle.	Emergency control handle moves to fully aft position and is blocked.
17. Lower and lock door with exterior control handle.	Exterior control handle is closed and flap is flush with contour of exterior control handle. Interior control handle stays in locked position.
18. Lift door with exterior control handle and slowly lower with interior control handle.	Exterior control handle springs to locked position and "LOCKED" is shown in aperture of locking indicators.
19. Lift door with interior control handle and slowly lower with the exterior control handle.	Interior control handle springs to locked position and "LOCKED" is shown in aperture of locking

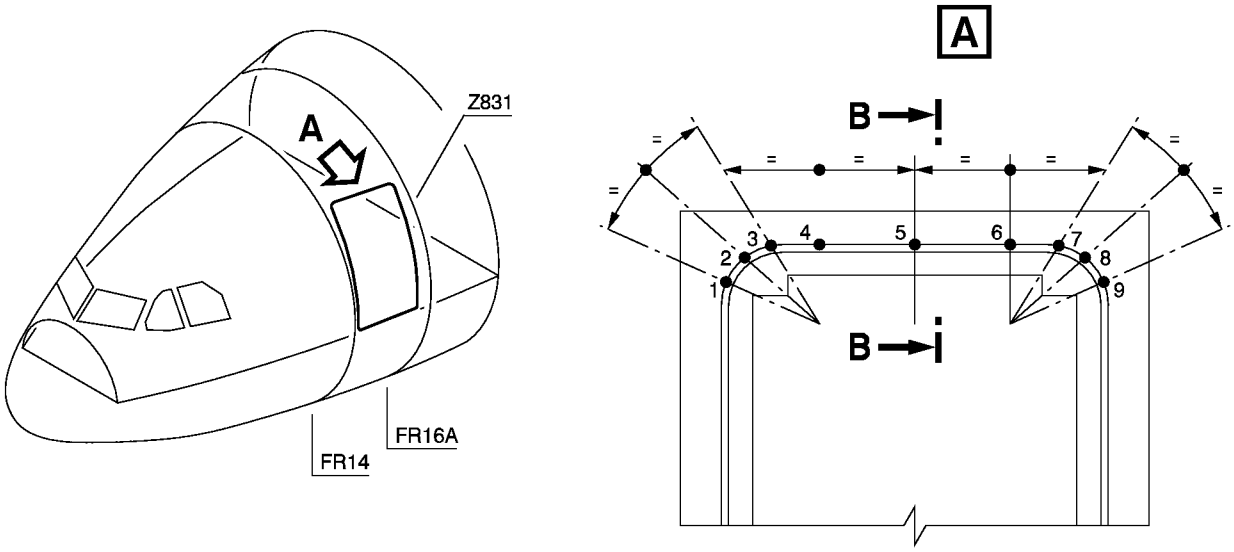
ACTION	RESULT
	indicators.

ACTION	RESULT
20. Attach spring balance to emergency control handle and move it from fully aft to fully forward position.	The force required does not exceed 10 daN (22 lbf.).
21. Attach spring balance to emergency control handle and move it from fully forward to fully aft position.	The force required does not exceed 10 daN (22 lbf.).
WARNING : INSERT SAFETY PIN FOR EMERGENCY CONTROL HANDLE.	
22. Lift door with exterior control handle and lower door with interior control handle.	Exterior control handle is closed and flap is locked.
23. Unlock door with interior control handle.	Locking mechanism operates smoothly.
24. Lift door with interior control handle.	Door lifting action is smooth.
25. Lower door with exterior control handle.	Door lowering action is smooth.
26. Lock door with exterior control handle.	Locking mechanism operates smoothly.
27. Lift and fully open door with interior control handle.	The force required at the door control handle to swing the door open does not exceed 15 daN (33 lbf.). Door stay mechanism is locked.
28. Unlock door stay mechanism, close and lock door.	The force required at the door control handle to swing the door to the "high closed" position does not exceed 15 daN (33 lbf.).
29. Door damper and emergency operation cylinder must be safetied (Ref. 52-10-00, P. Block 301).	
30. Remove safety pin for emergency control handle and set emergency control handle to fully forward position.	

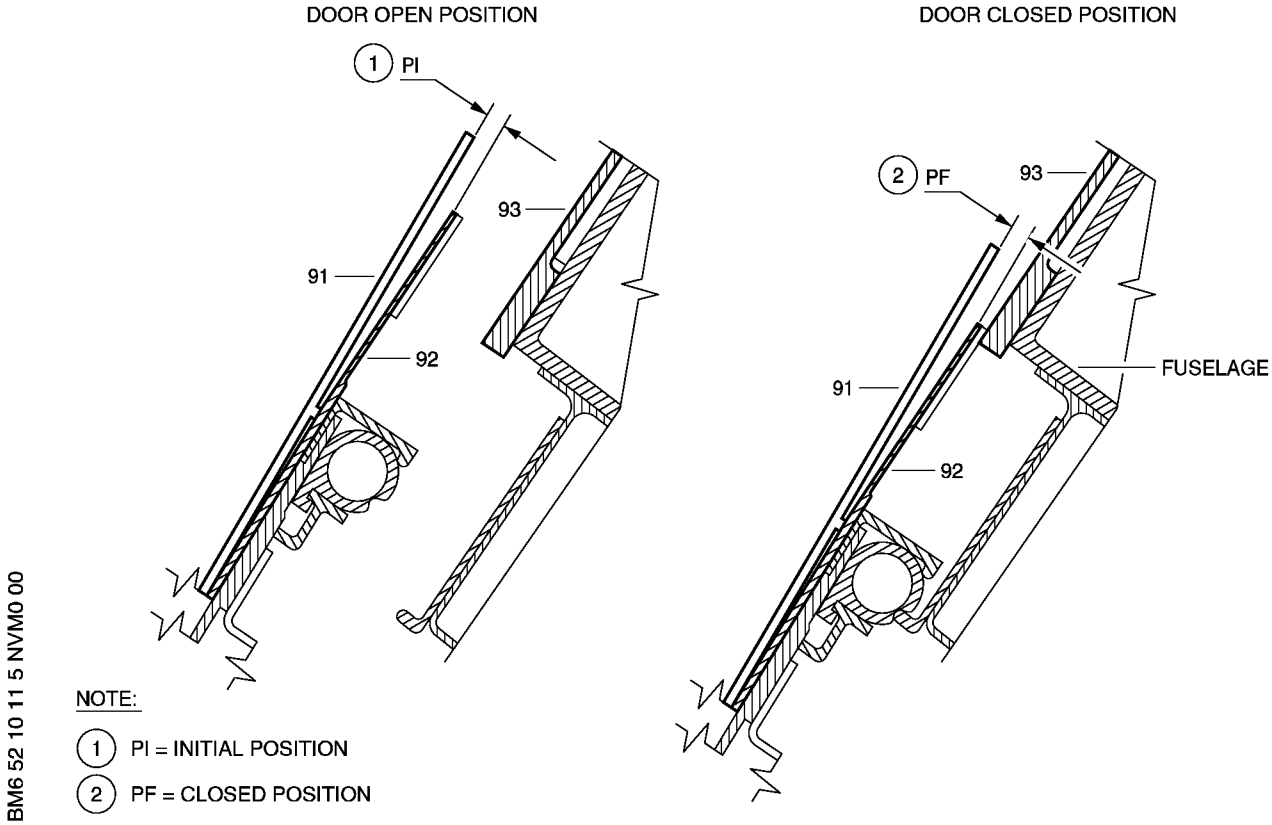
ACTION	RESULT
31. Place door in "high closed" position.	The distance between the normal contact surfaces of the stop and release lever of door damper is 5 ±1.0 mm (0.2 ±0.04 in.).
32. Lower door, set emergency control handle to fully aft position and insert safety pin.	
33. Swing door open by hand.	Door movement is visibly damped just before the end of travel.
34. Swing door close by hand.	Door movement is visibly damped just before the end of travel.
35. Check vertical/lateral gap between door and the fuselage skin (Ref. Fig. 502, Section B-B and C-C).	Vertical gap is between: on FWD doors 2 and 6 mm (0.08 and 0.24 in.) on AFT doors 3 and 7 mm (0.12 and 0.28 in.)
36. Check longitudinal/horizontal gap between bottom of door and scuff plate (Ref. Fig. 502, Detail E).	Longitudinal gap between the bottom of the door and scuff plate is on FWD doors min. 1.0 mm (0.04 in.) max. 5.5 mm (0.20 in.) on AFT doors max. 6.8 mm (0.268 in.) over the complete length of door bottom.
37. Visually check: - exterior skin - rubber buffer - rubber door seal - side guide rollers - door and fuselage mounted stop fittings including stop bolts	 No damage No signs of ageing No damage Freedom of movement No damage or signs of wear
38. Arm door damper and emergency operation cylinder (Ref. 52-10-00, P. Block 301).	

R ** ON FWD PASSENGER/CREW DOOR

R G. Check of Pre-load of Cover Plate
R (Ref. Fig. 511)
R (1)Make sure that an access platform is below the closed door.
R (2)Tap around the cover plate (92) at points 1 to 9 and make sure that you



SECTION
B-B



NOTE:

(1) PI = INITIAL POSITION

(2) PF = CLOSED POSITION

BM6 52 10 11 5 NVM0 00

Check of Pre-load of Cover Plate
Figure 511

R

R do not hear a hollow sound.
R (3)If you hear a hollow sound, proceed as follows:
R (a)Position the pre-crushing tool PN 98D52003002000 (91) on the door.
R (b)Determine the pre-load of the cover plate (92) as follows:
R 1 Measure the distance "PF" between the pre-crushing tool (91) and the cover plate (92) at the closed door.
R 2 Open the door.
R 3 Measure the distance "PI" between the pre-crushing tool (91) and the cover plate (92) at the opened door.
R (c)Calculate the pre-load "PEF" by subtraction of "PI" minus "PF" (PEF = PI - PF).

R NOTE : The pre-load "PEF" must be between 0.5 mm (0.02 in.) and 1.0 mm (0.04 in.).

R (d)If the pre-load "PEF" is not in the tolerance, manually prepare the cover plate (92) until the pre-load is correct.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

CAUTION : PERCENTAGE (%) OF ALLOWABLE DAMAGE IS ALWAYS RELATED TO NOMINAL MATERIAL THICKNESS AS SPECIFIED IN SRM (STRUCTURAL REPAIR MANUAL)

NOTE : Should crack formation be suspected during the following inspection/check, an approved non-destructive test must be carried out. If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Reason for the Job

A. To monitor the condition of the following:
NOTE : Item numbers correspond with operations in Para. 3.B.
(1)Door Skin, Structure and Water Drain Holes
(2)Upper and Lower Guide Fittings/Stop Fittings and Roller Fittings
(3)Door Latches
(4)Girt Bar Fittings
(5)Lowering Stop
(6)Compensation Mechanism
(7)Door Buffer
(8)Window (Ref. 56-31-15, P. Block 601)
(9)Measurement of Fits and Clearances

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B. 98A52108005000	Wear Measuring Unit - Passenger/Crew Door and Fuselage Stop Fitting
C. 98A52108006000	Wear Measuring Unit - Passenger/Crew Door and Fuselage Stop Fitting
D. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
or 98A52108008001	Support Frame - Ballast Weight, Doors
	NOTE : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
E.	Spring Balance, 10 to 16 daN (22 to 36 lbf.)
F.	Measuring Instruments as required
G.	Torch

	ITEM	DESIGNATION
	H.	Inspection Mirror
R	J.	Magnifying Glass X10
R	K. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 25-23-41, P. Block 401	Door Frame Lining
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coating
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-31, P. Block 401	FWD, AFT Door Latch and Stop Fittings
- 52-11-12, P. Block 401	FWD Door Suspension
- 52-11-21, P. Block 401	FWD Door Locking Mechanism
- 52-13-12, P. Block 401	AFT Door Suspension
- 52-13-21, P. Block 401	AFT Door Locking Mechanism
- 56-31-14, P. Block 601	Passenger/Crew Door Windows
	Structural Repair Manual

3. Procedure

A. Job Set-Up
(1)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401), or container with slide raft (Ref. 25-61-22, P. Block 401).
(4)Remove door frame linings (Ref. 25-23-41, P. Block 401).
(5)Remove door lining and insulation (Ref. 52-10-13, P. Block 401).
(6)Install ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(7)Open door.

B. Inspection/Check
(1)Door Skin, Structure and Water Drain Holes
R (a)The following areas have specific damage criteria:
R 1 Door shin.
R 2 Door structure.
R 3 Longerons (machined parts).
R 4 For the damage limits for steps 1 to 3 refer to SRM 52-10-00, P. Block 101.
R 5 Loose rivets
R Loose rivets must be replaced.
R 6 Check that the drain holes are clean and clear of obstruction.
R (b)Should damage limits be exceeded, a structural repair must be carried out, or component must be replaced.
R 1 For the removal of scratches, marks and dents refer to 51-73-10, P. Block 801.

R 2 For the removal of corrosion refer to 51-74-10, P. Block 801.
R 3 For the repair of paint coating refer to 51-75-10, P. Block 801.
R 4 For the repair of sealing refer to 51-76-10, P. Block 801.

(2)Upper and Lower Guide Fittings/Stop Fittings and Roller Fittings
(Ref. Fig. 601)
(Ref. Fig. 602)
(Ref. Fig. 603)
R (Ref. Fig. 604)

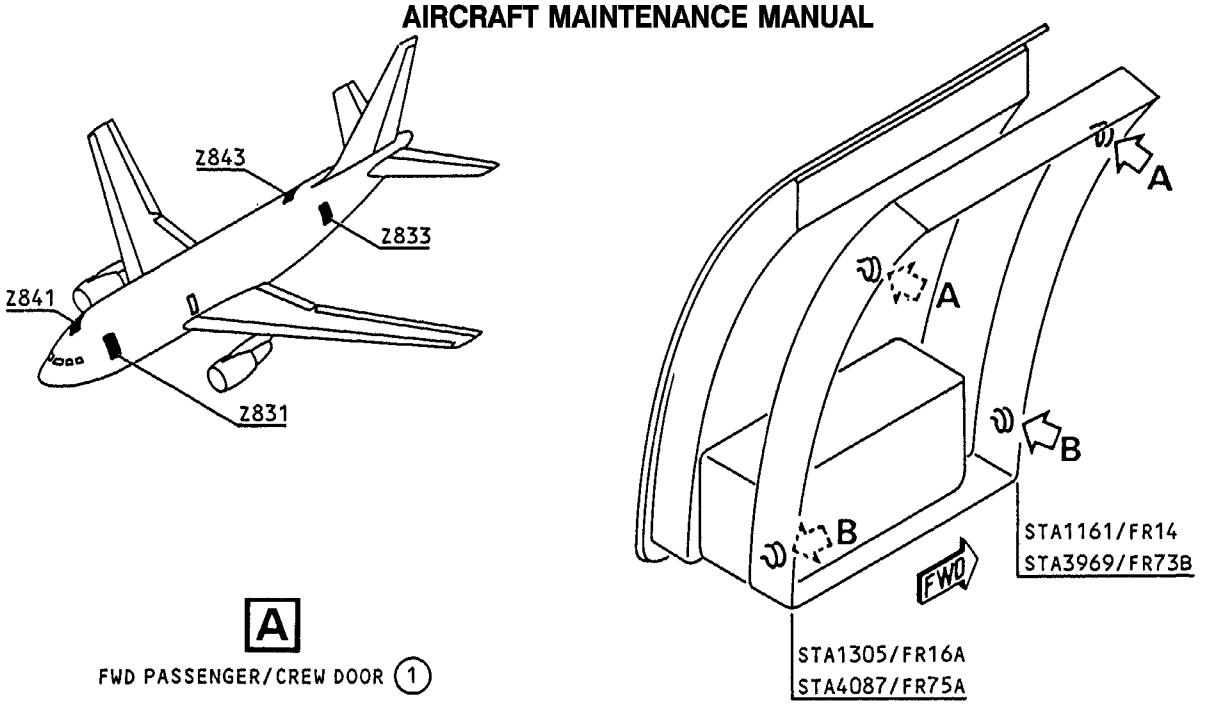
(a)Visually check upper and lower guide fittings (2),(5), (18), stop fittings (11),(10) on door and fuselage and roller fittings (15) for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents.
NOTE : A scratch or mark with a maximum depth of 0.3 mm (0.012 in.) is permissible. The scratch or mark, however, must be removed (Ref. 51-73-10, P. Block 801). If permissible depth is exceeded, the fitting must be replaced (Ref. 52-10-31, P. Block 401).
3 Security of attachment (Ref. 52-10-31, P. Block 401).

(b)Measurement
1 Close door.
2 Measure gaps "A" = MIN 0.2 mm (0.008 in.) between rollers (1),(6) and upper and lower guide fittings (2),(5).
3 Measure gap "C" = 0 thru 0.2 mm (0.008 in.).
4 Measure gap "D" = 4 thru 6 mm (0.1575 thru 0.2362 in.).
5 Open door.
6 Check for smooth engagement of rollers (1),(6) in guide fittings (2),(5) by pulling door into the fuselage frame.
7 Pull door slowly into the fuselage frame. Slightly lower door with internal control handle. When stop fittings (10),(11) begin to overlap, check that gap "E" between stop fittings (10),(11) is not less than 0.2 mm (0.008 in.).
8 Close door.
9 Measure gap "G" = MAX. 0.8 mm (0.031 in.) between bolts (12) of door stop fittings (11) and fuselage stop fittings (10). (For adjustment ref. 52-10-11, P. Block 501).

NOTE : On FWD and AFT passenger/crew doors - A minimum of two stop fitting pairs (10),(11) on each side must be in contact.

10 Measure wear of bolts (12) in door stop fittings (11)
a Open door.
b Measure length of bolts (12). (For removal and installation ref. 52-10-31, P. Block 401)
11 Measure wear of fuselage stop fittings (10).
a Open door.
b Fit appropriate wear measuring gage.
c Using appropriate test mandrel, measure wear of fuselage stop fittings (10) (For removal and installation ref. 52-10-31, P. Block 401).

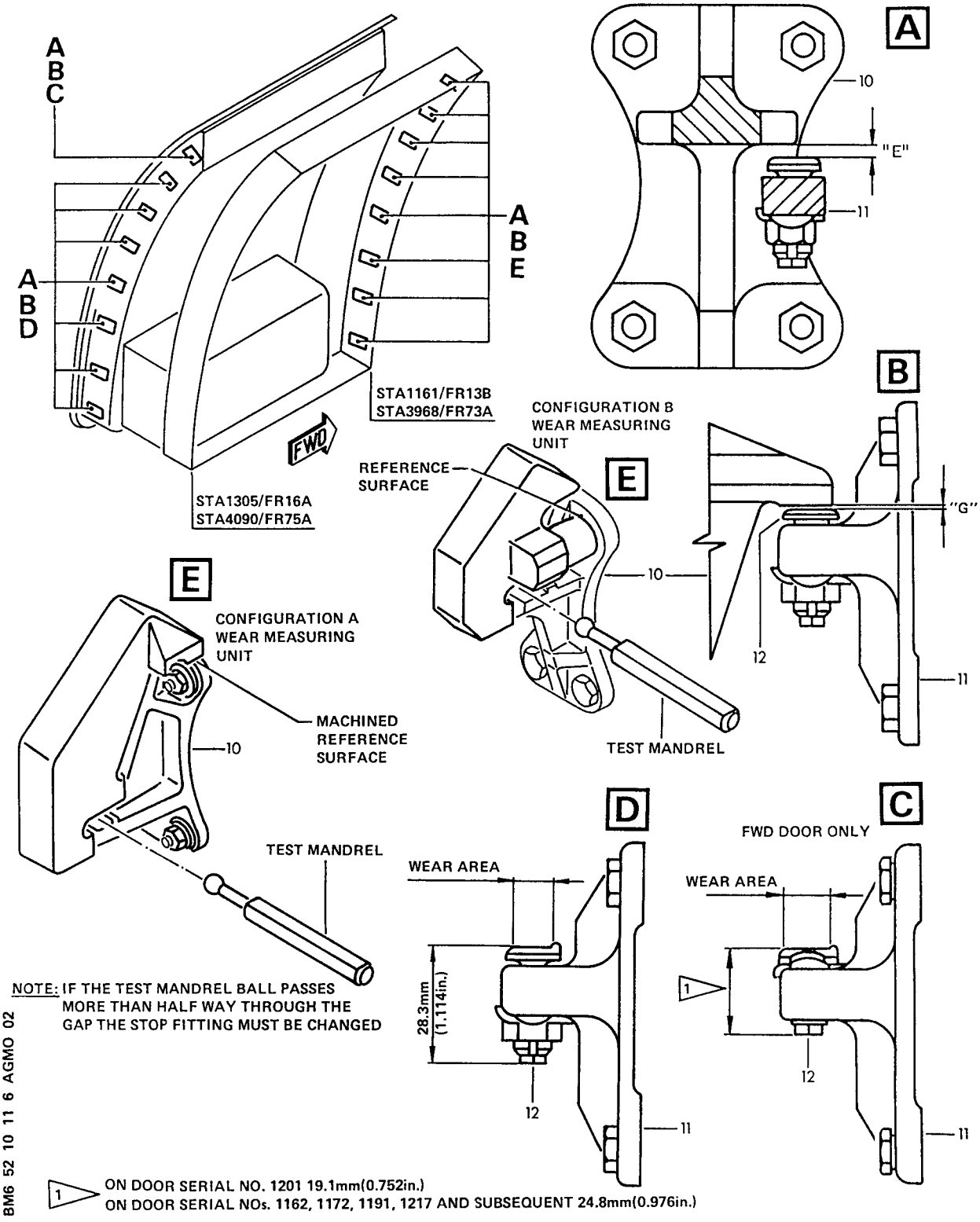
NOTE : On fuselage stop fittings where machined reference surface exists, use wear measuring gage PN 98A52108006001 and test mandrel PN 98A52108006003.
On fuselage stop fittings where machined reference surface



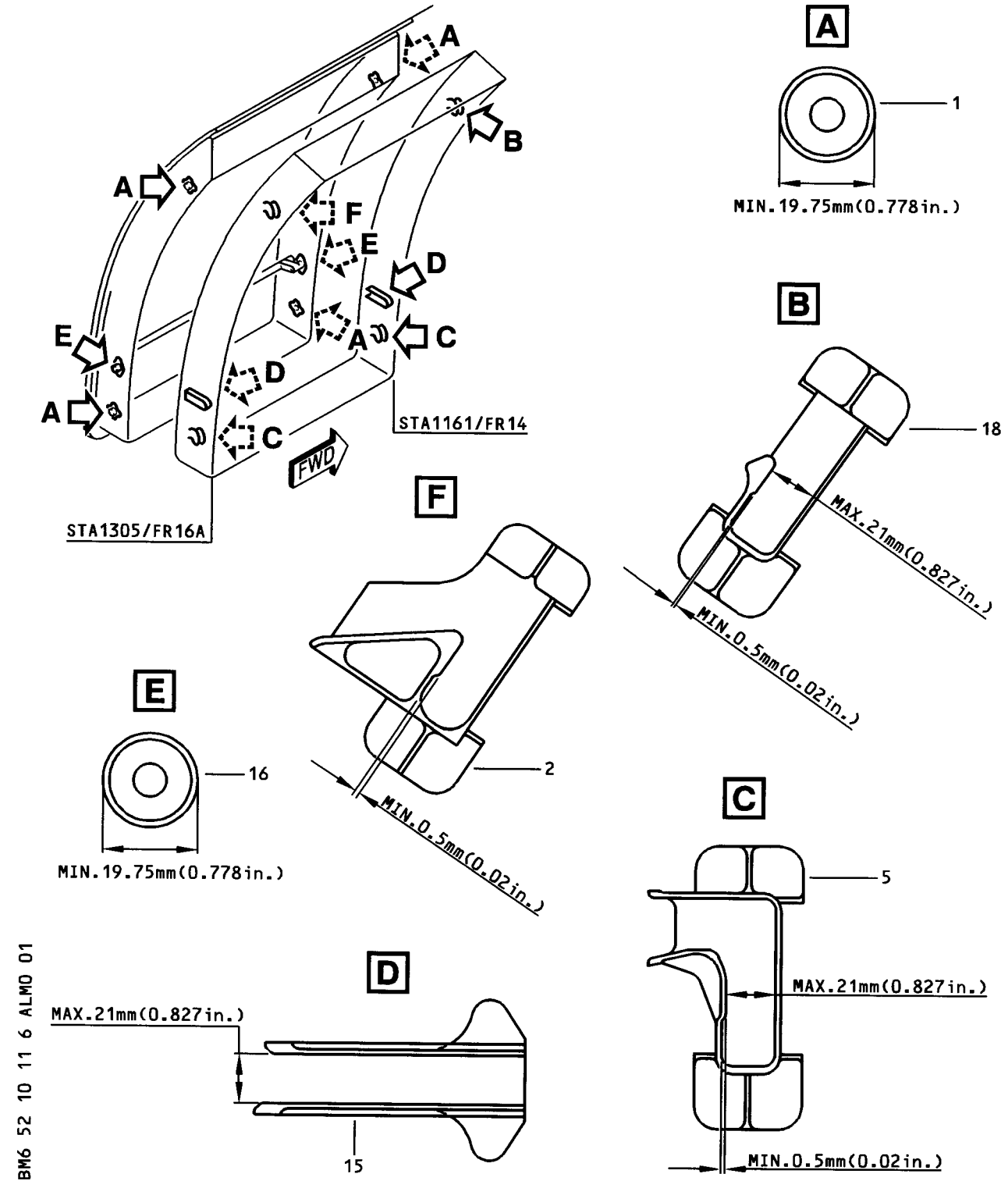
(1) UPPER GUIDE FITTINGS AT FRAMES 14 AND 73A SHOWN.
UPPER GUIDE FITTINGS AT FRAMES 16A AND 75A
HAVE LONGER GUIDE TRACKS

BM6 52 10 11 6 AEMO 01

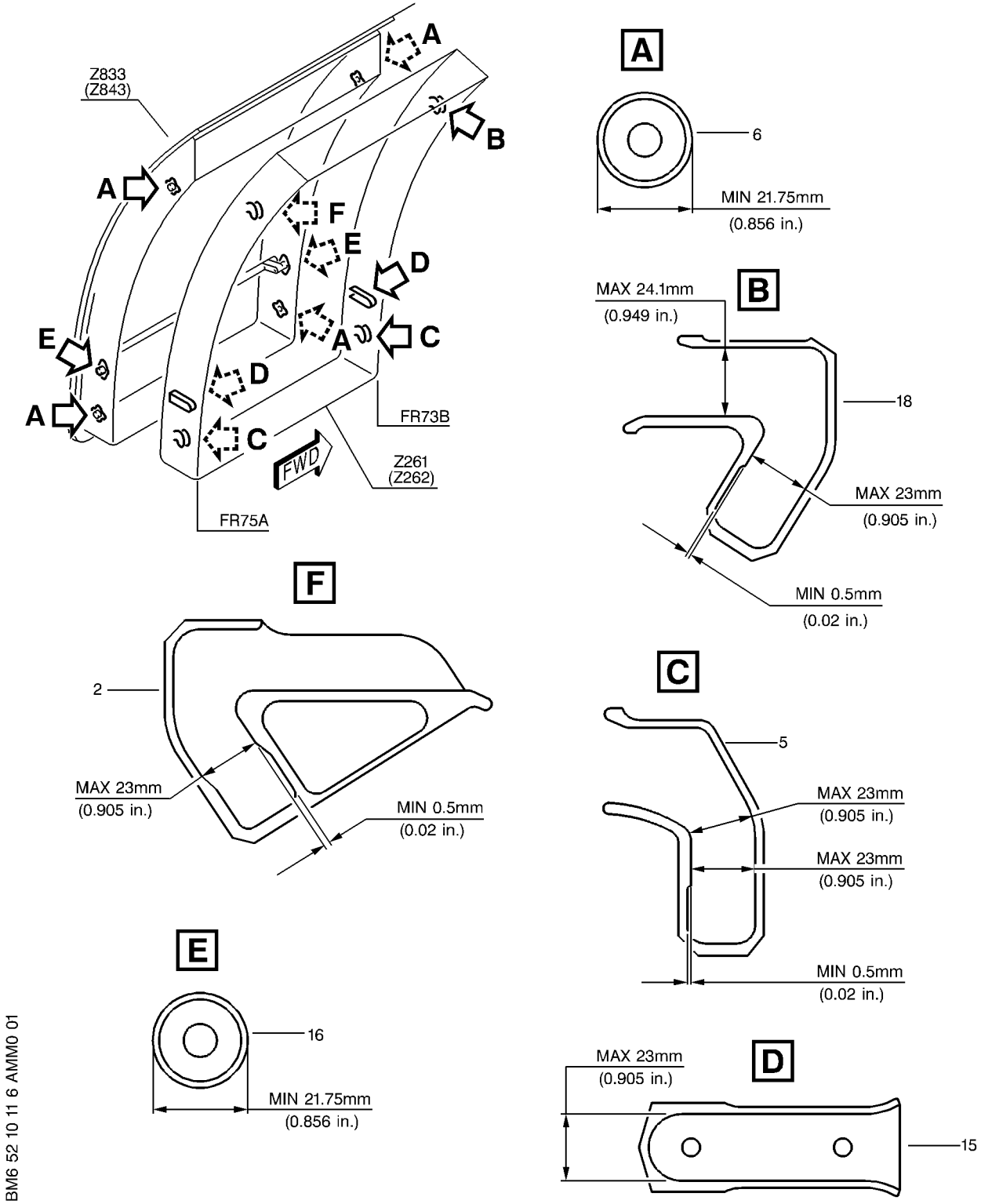
Upper and Lower Guide Fittings
Figure 601



Door and Fuselage Stop Fittings
Figure 602



Wear Measuring of Upper and Lower Guide Fittings
Roller Fittings and Guide Rollers
Figure 603



Wear Measuring of Upper and Lower Guide Fittings
Roller Fittings and Guide Rollers
Figure 604

R

does not exist, use wear measuring gage PN 98A52108005100 and test mandrel PN 98A52108005103.
Or, after SIL 53-044;
Use wear measuring gage PN 98A52108006001 and test mandrel 98A52108006003.

12 Measure wear of guide fittings (2),(5),(18) and rollers (1),(6).
a Measure wear of upper guide fittings (2),(18).
b Measure wear of lower guide fittings (5).
c Measure wear of rollers (1),(6) (For removal and installation of fittings or rollers ref. 52-10-31, P. Block 401).
13 Measure wear of roller fittings (15) and rollers (16).
a Open door.
b Measure wear of roller fittings (15) (For removal and installation ref. 52-10-31, P. Block 401).
c Measure wear of rollers (16) (For removal and installation ref. 52-11-21, P. Block 401 and 52-13-21, P. Block 401).

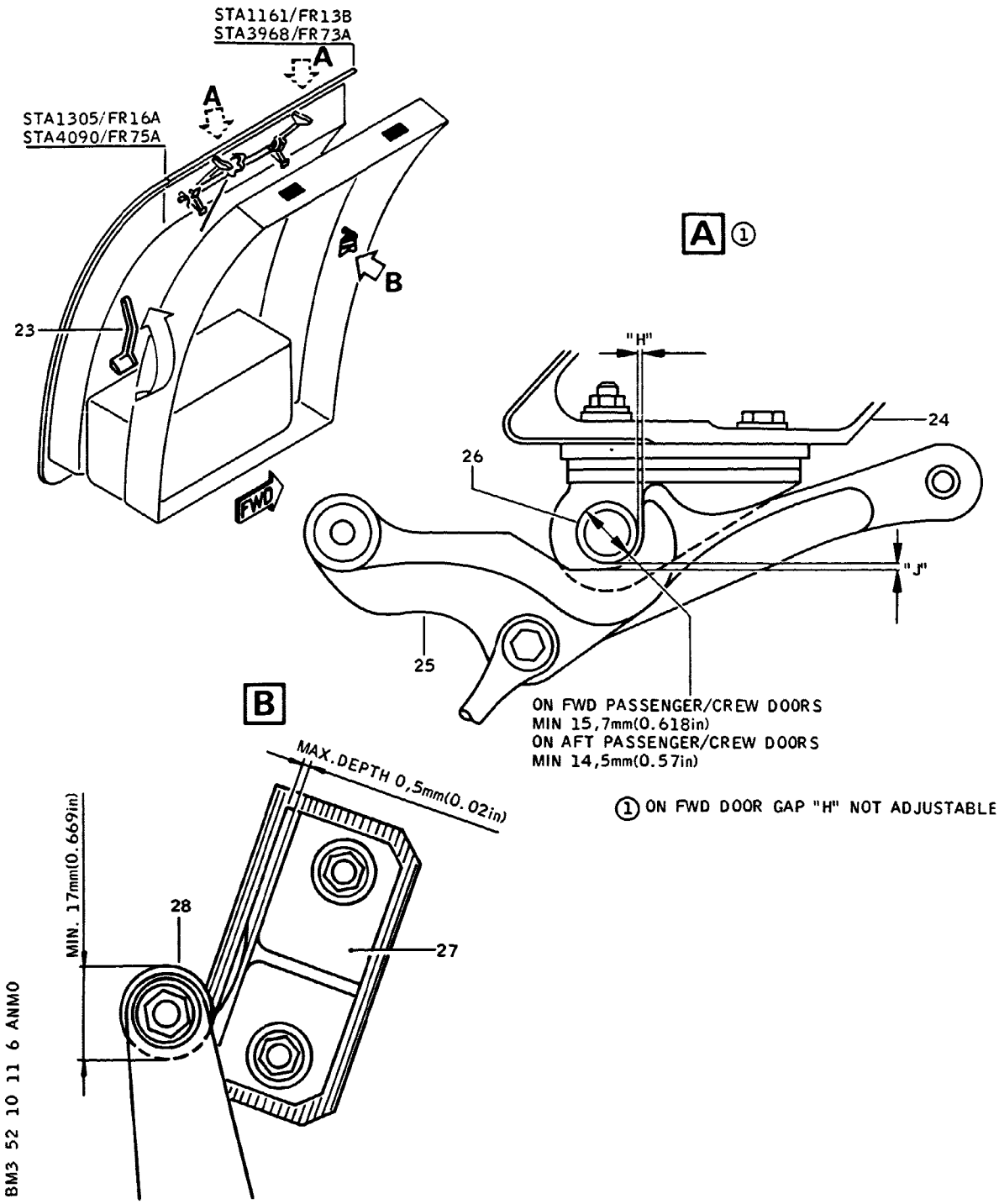
(3)Door Latches
(Ref. Fig. 605)
(a)Visually check both door latches (25) for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents.
NOTE : A scratch or mark with a maximum depth of 0.3 mm (0.012 in.) is permissible. The scratch or mark, however, must be removed (Ref. 51-73-10, P. Block 801). If permissible depth is exceeded, the fitting must be removed (Ref. 52-10-31, P. Block 401).
3 Security of attachment (Ref. 52-10-31, P. Block 401).
(b)Measure gaps as follows:
1 Close door.

** ON FWD PASSENGER/CREW DOORS

2 Measure gap "H" = Not adjustable.
3 Measure gap "J" = 0.2 thru 1.0 mm (0.008 thru 0.04 in.)
(For adjustment ref. 52-10-11, P. Block 501).

** ON AFT PASSENGER/CREW DOORS

2 Measure gap "H" = 0.1 thru 1.0 mm (0.004 thru 0.04 in.)
3 Measure gap "J" = 0.1 thru 1.0 mm (0.004 thru 0.04 in.)
(For adjustment ref. 52-10-11, P. Block 501).



Door Latches and Lowering Stop
Figure 605

** ON FWD AND AFT PASSENGER/CREW DOORS

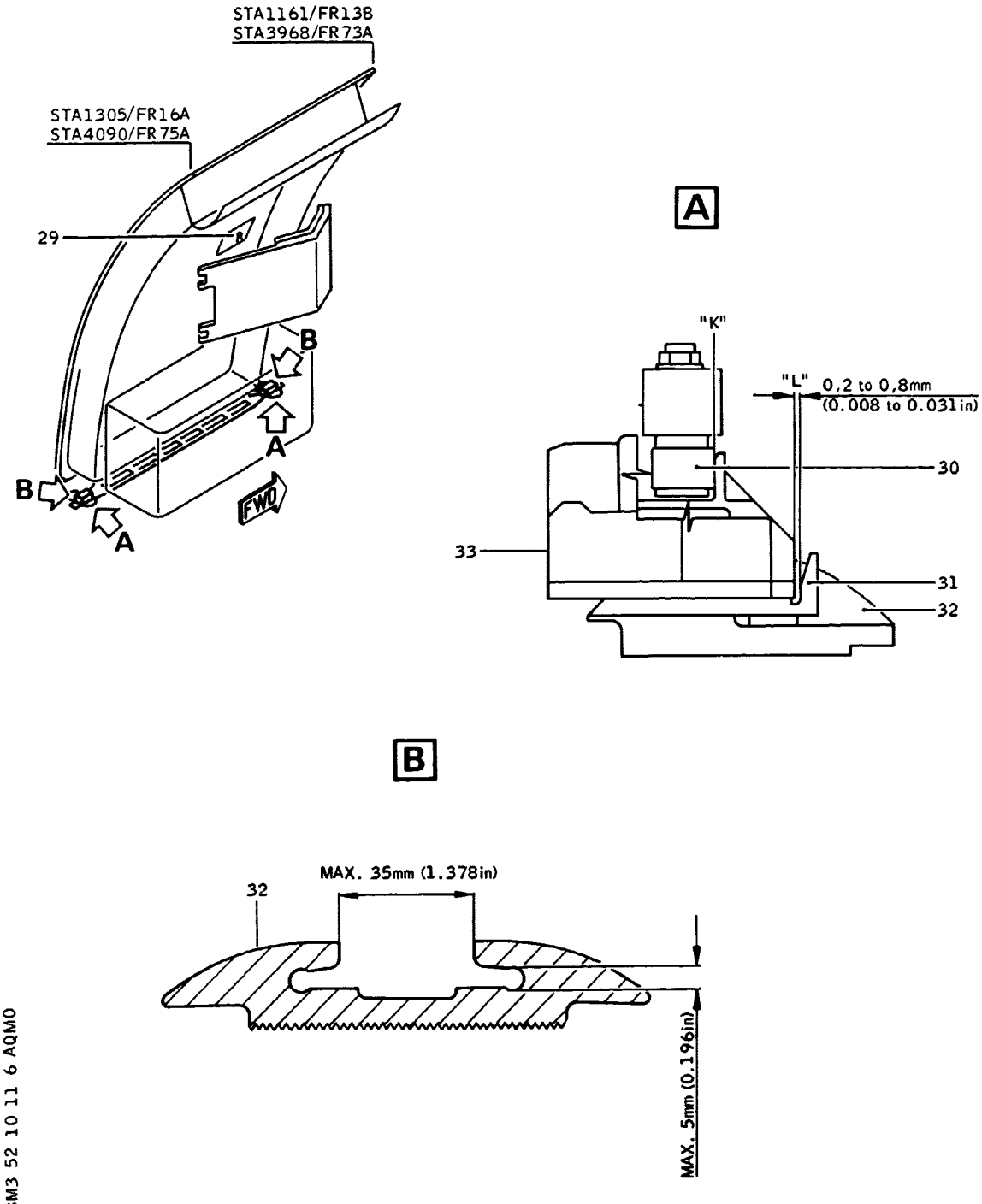
(c)Measure wear as follows:
1 Open door.
2 Measure dimension of rollers (26).
(For removal and installation ref. 52-10-31, P. Block 401)

(4)Girt Bar Fittings
(Ref. Fig. 606)
(a)Visually check both girt bar fittings (32) for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents.
NOTE : A scratch or mark with a maximum depth of 0.3 mm (0.012 in.) is permissible. The scratch or mark, however, must be removed (Ref. 51-73-10, P. Block 801). If permissible depth is exceeded, the fitting must be removed (Ref. 52-10-31, P. Block 401).
3 Security of attachment (Ref. 52-10-31, P. Block 401).
(b)Measurement
1 Check operating force of emergency control handle (29) as follows:
a Close door.
b Set emergency control handle (29) from fully aft to fully forward and back to fully aft position. Operating force in each direction must not exceed max. 10 daN (22 lbf.).
2 Measure gaps as follows:
a Set emergency control handle (29) to fully forward position.
b Push back slider (33) to contact roller (30) face "K" and measure gaps "L" between sliders (33) and stops (31) of girt bar fittings (32) (For adjustment ref. 52-10-11, P. Block 501).
3 Measure wear of girt bar fittings (32) (Ref. 52-10-31, P. Block 401).

(5)Lowering stop (Ref. Fig. 605)
(a)Visually check lowering stop (27) for:
1 Corrosion (Ref. 51-74-10, P. Block 801)
2 Scratches, marks and dents.

NOTE : A scratch or mark with a maximum depth of 0.3 mm (0.012 in.) is permissible. The scratch or mark, however, must be removed (Ref. 51-73-10, P. Block 801). If permissible, depth is exceeded, the fitting must be removed (Ref. 52-10-31, P. Block 401).

3 Security of attachment (Ref. 52-10-31, P. Block 401).
(b)Measurement
1 Check operation as follows:
a Close door against lowering stop (27).
b Lower door, and during lowering action press door outwards checking at the same time that lowering action is smooth over first third of travel.



BM3 52 10 11 6 AQM0

Girt Bar Fittings
Figure 606

c Open door to "high" position and during following outboard movement of door try to move interior control handle (23) downwards. Movement of interior control handle (23) must be blocked (For adjustment ref. 52-10-11, P. Block 501).

2 Measure wear as follows:

a Measure depth of wear of lowering stop (27).

b Measure wear of roller (28). (For removal and installation ref. 52-11-21, P. Block 401 and ref. 52-13-21, P. Block 401).

(6)Compensation mechanism

** ON AFT PASSENGER/CREW DOORS

(a)Check tension indicator placard for condition and correct seat. If necessary, renew it (Ref. 52-10-11, P. Block 501 Adjustment of Compensation Mechanism).

** ON ALL DOORS

(b)Check operation of torsion bar spring.

1 Open door

2 Turn lowering shaft by hand until hook disengages from gear box.

3 Check that door remains in high position.

4 Check that the force required to operate the interior control handle (23) is max. 16 daN (36 lbf.).

5 Check that the difference between the force required to lift and lower the door is max. 4 daN (9 lbf.).

(c)If requirements per step (b) are not satisfied, refer to 52-10-11, P. Block 501, Compensation Mechanism and Lowering Stop.

(7)Door Buffer

(Ref. Fig. 607)

(a)Visually check door buffer (36) for:

1 Damage

2 Wear

3 Aging and cracking of rubber

(b)Check support (37) of door buffer (36) for:

1 Corrosion (Ref. 51-74-10, P. Block 801)

2 Damage

3 Scratches, marks and dents (Ref. 51-73-10, P. Block 801)

4 Security of attachment (Ref. 52-11-12 and 52-13-12, P. Block 401).

(c)Measurement

1 Check operation and gap as follows:

a Open door.

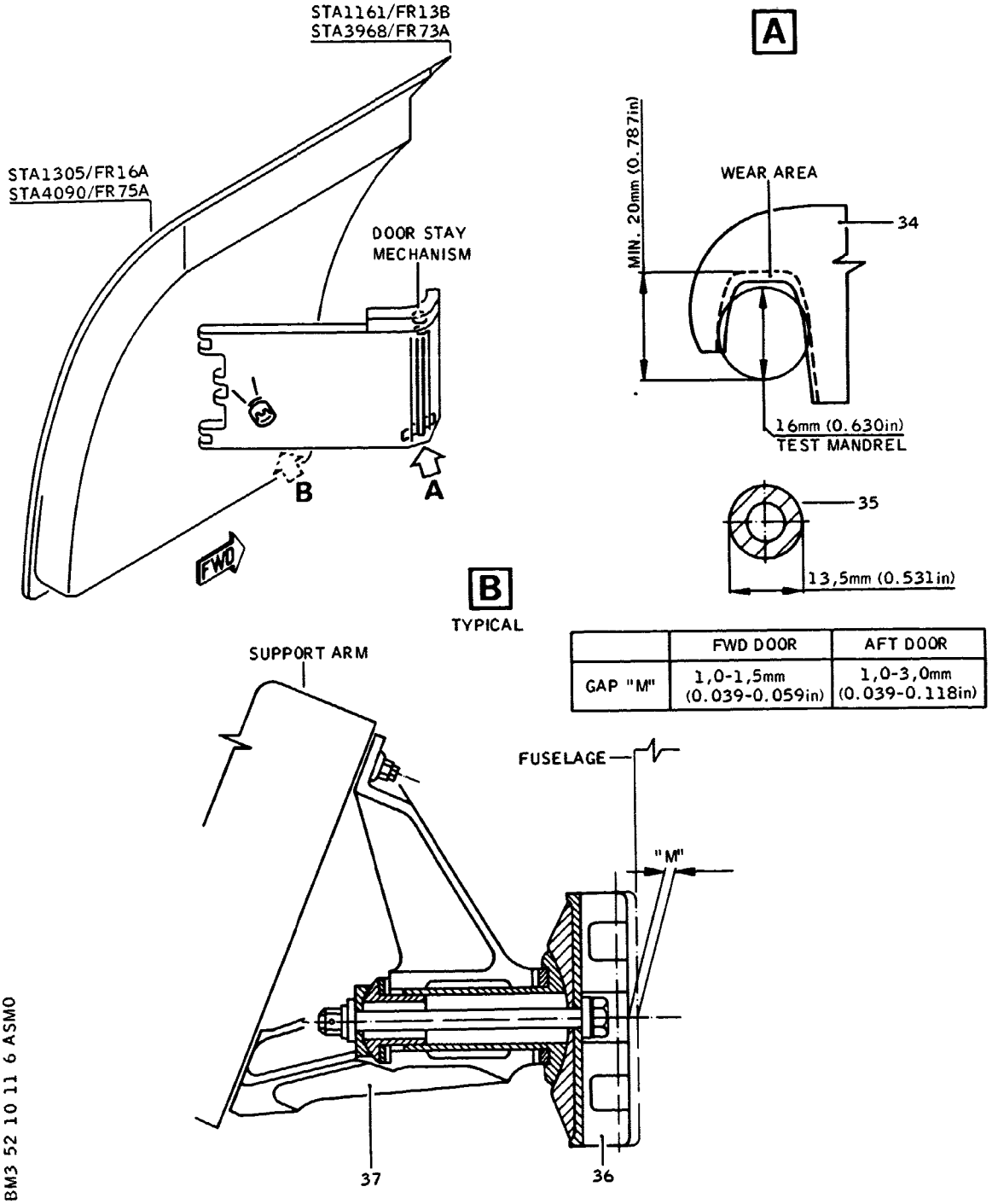
b Check locking of door stay mechanism.

c Measure gap "M" between door buffer and fuselage.
(For removal/installation:
Ref. 52-11-12, P. Block 401, FWD Door
Ref. 52-13-12, P. Block 401, AFT Door)
(For adjustment ref. 52-10-11, P. Block 501)

2 Measure wear as follows:

a Measure wear of roller (35).

b Measure wear of hook (34).



	FWD DOOR	AFT DOOR
GAP "M"	1,0-1,5mm (0.039-0.059in)	1,0-3,0mm (0.039-0.118in)

Door Buffer and Hook of Door Stay Mechanism
Figure 607

(8)Window (Ref. 56-31-14, P. Block 601).
(9)Measurement of Fits and Clearances.
Refer to tables following this topic.
NOTE : 1) in any column denotes bearings or PTFE-bushes.

C. Close-Up

(1) Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(2) Close door.

(3) Remove ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.

(4) Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).

(5) Install door lining and insulation (Ref. 52-10-13, P. Block 401).

(6) Install door frame linings (Ref. 25-23-41, P. Block 401).

(7) Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

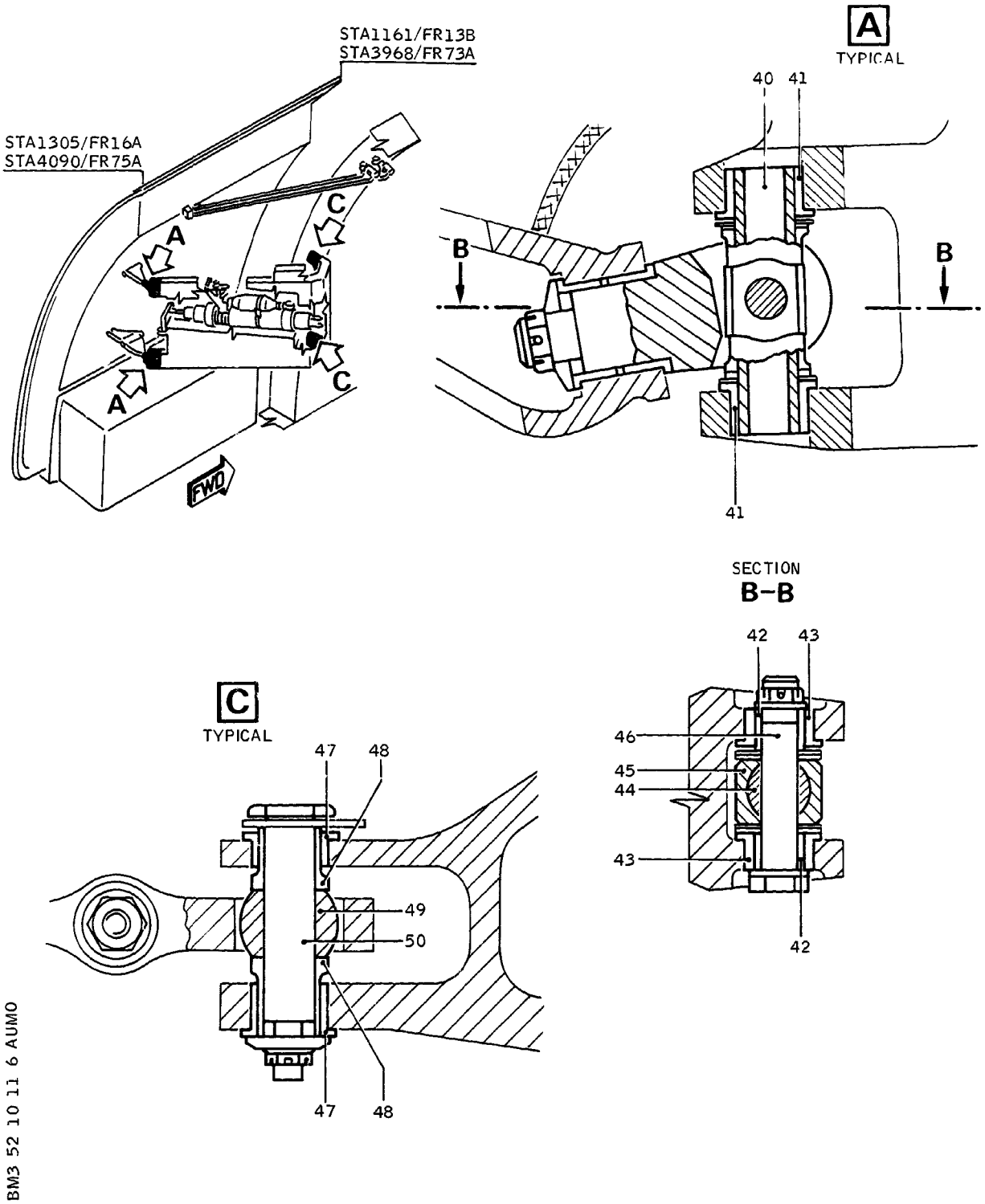
(8) Arm door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).

(9) Remove access platform.

Fits and Clearances
(Ref. Fig. 608)
(Ref. Fig. 609)

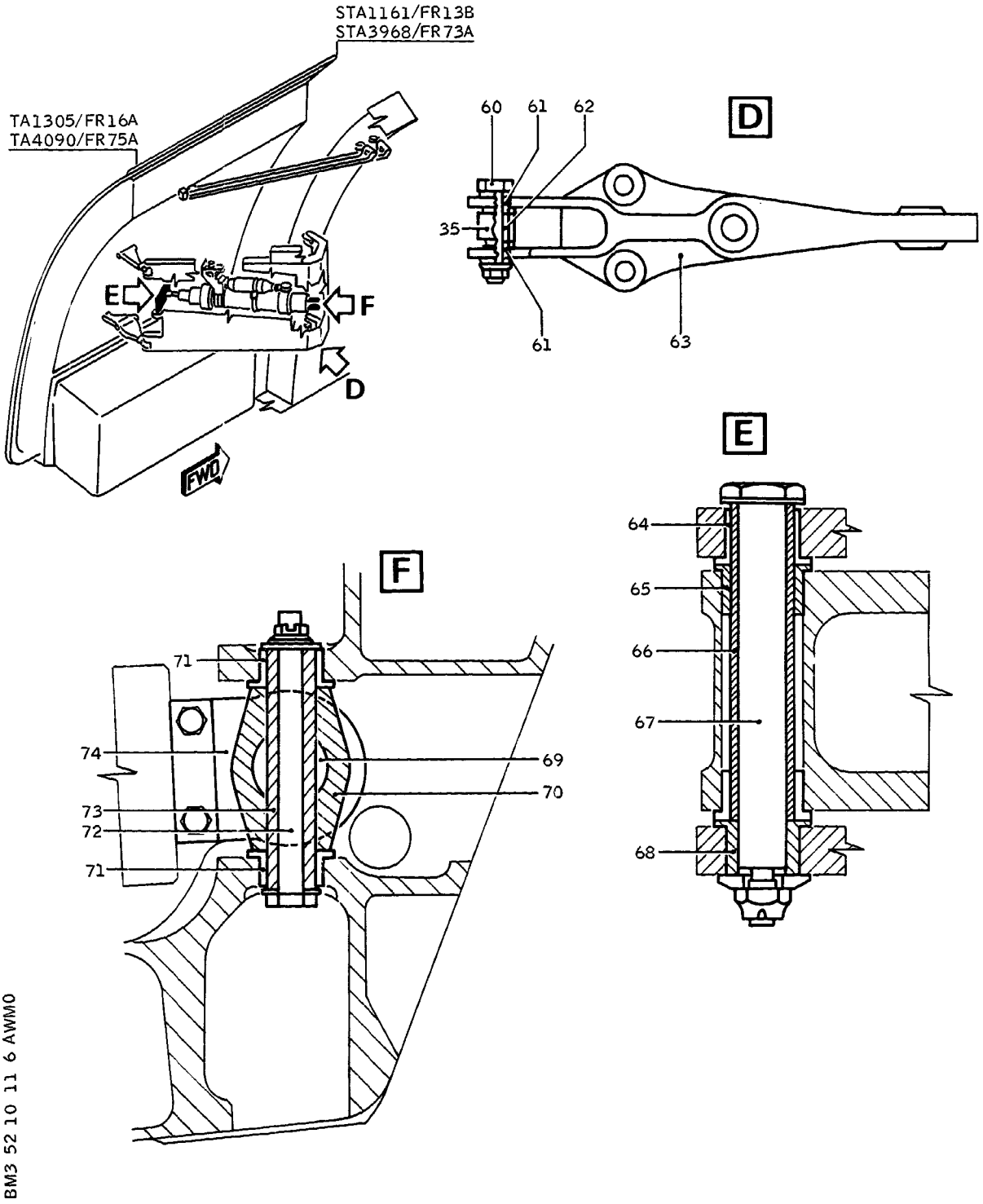
**** ON FWD AND AFT PASSENGER/CREW DOORS**

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A OD 40	15.900 (0.6260)	15.911 (0.6264)			15.893 (0.6257)		
			-0.018 -(0.0007)	0.018 (0.0007)			1)
A ID 41	15.893 (0.6236)	15.918 (0.6267)				1)	
D OD 60	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
D ID 61	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
D OD 61	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
D ID 63	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
D OD 60	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
D ID 35	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
D OD 35	9.472 (0.3729)	9.487 (0.3735)			9.451 (0.3721)		
			0.038 (0.0015)	0.068 (0.0027)			0.110 (0.0043)
D ID 62	9.525 (0.3750)	9.540 (0.3756)				9.561 (0.3764)	



BM3 52 10 11 6 AUMO

Support Arm - Door and Fuselage Connections
Figure 608



Door Damper and Emergency Operation Cylinder Connections
Figure 609

Fits and Clearances (Ref. Fig. 608)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A, B-B OD 46	9.499 (0.3740)	9.512 (0.3745)			9.481 (0.3733)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
A, B-B ID 42	9.517 (0.3747)	9.526 (0.3750)				9.539 (0.3756)	
A, B-B OD 42	12.722 (0.5009)	12.733 (0.5013)			12.715 (0.5006)		
			-0.018 -(0.0007)	0.019 (0.0007)			1)
A, B-B ID 43	12.715 (0.5006)	12.741 (0.5016)				1)	
A, B-B OD 46	9.499 (0.3740)	9.512 (0.3745)			9.481 (0.3733)		
			0.029 (0.0011)	0.051 (0.0020)			0.082 (0.0032)
A, B-B ID 44	9.541 (0.3756)	9.550 (0.3760)				9.563 (0.3765)	
A, B-B OD 44	15..900 (0.6260)	15.911 (0.6264)			15.893 (0.6257)		
			-0.002 -(0.0001)	0.027 (0.0011)			0.059 (0.0023)
A, B-B ID 45	15.909 (0.6263)	15.927 (0.6270)				15.952 (0.6280)	
A, B-B OD 46	9.499 (0.3740)	9.512 (0.3745)			9.481 (0.3733)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
A, B-B ID 45	9.517 (0.3747)	9.526 (0.3750)				9.539 (0.3756)	

Fits and Clearances (Ref. Fig. 608)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
C OD 50	14.262 (0.5615)	14.273 (0.5619)			14.246 (0.5609)		
			0.003 (0.0001)	0.032 (0.0013)			0.073 (0.0029)
C ID 48	14.276 (0.5620)	14.294 (0.5628)				14.319 (0.5637)	
C OD 48	15.983 (0.6293)	15.994 (0.6297)			15.967 (0.6286)		
			0.006 (0.0002)	0.035 (0.0014)			0.070 (0.0028)
C ID 47	16.000 (0.6299)	16.018 (0.6306)				16.037 (0.6314)	
C OD 50	14.262 (0.5615)	14.273 (0.5619)			14.246 (0.5609)		
			0.002 (0.0001)	0.026 (0.0010)			1)
C ID 49	14.275 (0.5620)	14.288 (0.5625)				1)	

Fits and Clearances (Ref. Fig. 609)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
E OD 67	12.674 (0.4990)	12.684 (0.4994)			12.656 (0.4983)		
			0.016 (0.0006)	0.044 (0.0017)			0.080 (0.0031)
E ID 66	12.700 (0.5000)	12.718 (0.5007)				12.736 (0.5014)	
E OD 66	15.900 (0.6260)	15.911 (0.6264)			15.890 (0.6256)		
			-0.018 -(0.0007)	0.018 (0.0007)			0.036 (0.0014)
E ID 65	15.893 (0.6257)	15.918 (0.6267)				15.926 (0.6270)	
E OD 67	12.674 (0.4990)	12.684 (0.4994)			12.656 (0.4983)		
			0.016 (0.0006)	0.044 (0.0017)			0.080 (0.0031)
E ID 68	12.700 (0.5000)	12.718 (0.5007)				12.736 (0.5014)	
E OD 66	15.900 (0.6260)	15.911 (0.6264)			15.875 (0.6250)		
			0.031 (0.0012)	0.053 (0.0021)			0.100 (0.0039)
E ID 64	15.942 (0.6276)	15.953 (0.6281)				15.975 (0.6289)	

Fits and Clearances (Ref. Fig. 609)

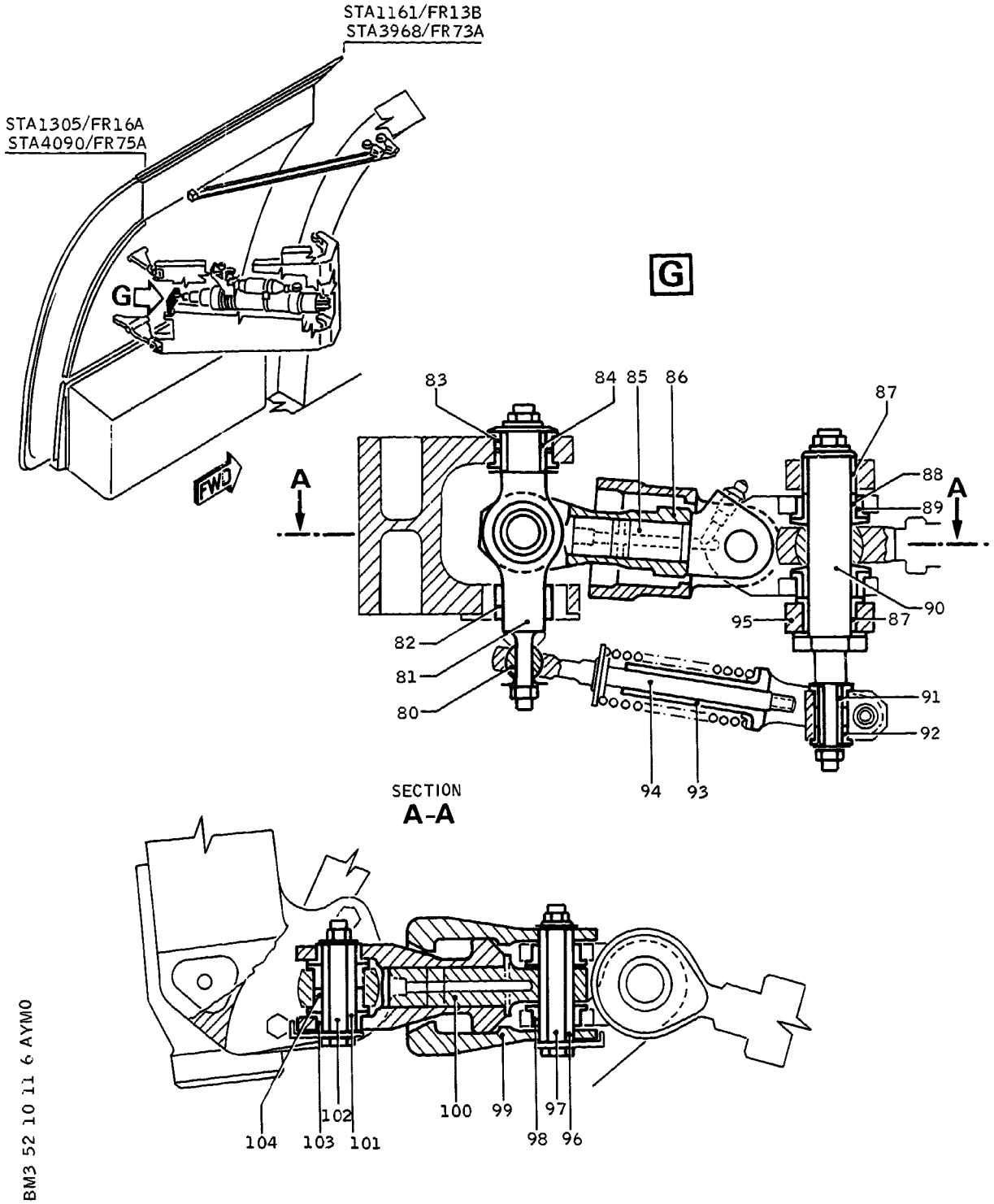
** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
F OD 72	6.312 (0.2485)	6.357 (0.2503)			6.306 (0.2483)		
			0.043 (0.0017)	0.188 (0.0074)			0.200 (0.0079)
F ID 73	6.400 (0.2520)	6.500 (0.2559)				6.506 (0.2561)	
F OD 73	12.983 (0.5111)	12.994 (0.5116)			12.965 (0.5104)		
			0.006 (0.0002)	0.035 (0.0014)			0.070 (0.0028)
F ID 71	13.000 (0.5118)	13.018 (0.5125)				13.035 (0.5132)	
F OD 73	12.983 (0.5111)	12.994 (0.5116)			12.965 (0.5104)		
			0.006 (0.0002)	0.035 (0.0014)			0.070 (0.0028)
F ID 70	13.000 (0.5118)	13.018 (0.5125)				13.035 (0.5132)	
F OD 73	12.983 (0.5111)	12.994 (0.5116)			12.965 (0.5104)		
			0.006 (0.0002)	0.035 (0.0014)			0.060 (0.0024)
F ID 69	13.000 (0.5118)	13.100 (0.5157)				13.025 (0.5128)	
F OD 69	19.078 (0.7511)	19.091 (0.7516)			19.060 (0.7504)		
			0.001 (0.00003)	0.035 (0.0014)			0.070 (0.0028)
F ID 70	19.092 (0.7517)	19.113 (0.7525)				19.130 (0.7531)	

Fits and Clearances
(Ref. Fig. 610)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
G OD 90	15.848 (0.6239)	15.859 (0.6244)			15.830 (0.6232)		
			0.006 (0.0002)	0.028 (0.0011)			0.060 (0.0024)
G ID 87	15.865 (0.6246)	15.876 (0.6250)				15.890 (0.6256)	
G OD 87	18.980 (0.7472)	18.993 (0.7478)			18.960 (0.7465)		
			0.007 (0.0003)	0.041 (0.0016)			0.080 (0.0031
G ID 95	19.000 (0.7480)	19.021 (0.7489)				19.041 (0.7496)	
G OD 90	15.848 (0.6239)	15.859 (0.6244)			15.830 (0.6232)		
			0.006 (0.0002)	0.028 (0.0011)			0.060 (0.0024)
G ID 88	15.865 (0.6246)	15.876 (0.6247)				15.890 (0.6256)	
G OD 88	19.078 (0.7511)	19.091 (0.7516)			19.070 (0.7508)		
			-0.021 -(0.0008)	0.023 (0.0009)			1)
G ID 89	19.070 (0.7508)	19.101 (0.7520)				1)	
G OD 81	15.900 (0.6260)	15.911 (0.6264)			15.891 (0.6256)		
			-0.018 -(0.0007)	0.018 (0.0007)			0.036 (0.0014)
G ID 82	15.839 (0.6236)	15.918 (0.6267)				15.927 (0.6270)	



Telescopic Unit and Preloading Spring Unit
Figure 610

Fits and Clearances (Ref. Fig. 610)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
G OD 81	15.900 (0.6260)	15.906 (0.6262)			15.897 (0.6259)		
			-0.013 -(0.0005)	0.011 (0.0004)			0.017 (0.0007)
G ID 84	15.893 (0.6257)	15.911 (0.6264)				15.914 (0.6265)	
G OD 84	15.900 (0.6260)	15.906 (0.6262)			15.891 (0.6256)		
			-0.013 -(0.0005)	0.018 (0.0007)			0.036 (0.0014)
G ID 83	15.893 (0.6257)	15.918 (0.6267)				15.927 (0.6270)	
G OD 85	13.973 (0.5501)	13.984 (0.5506)			13.950 (0.5492)		
			0.016 (0.0006)	0.045 (0.0018)			0.090 (0.0035)
G ID 86	14.000 (0.5512)	14.018 (0.5519)				14.040 (0.5528)	
G OD 94	6.986 (0.2750)	6.995 (0.2754)			6.970 (0.2744)		
			0.005 (0.0002)	0.029 (0.0011)			0.060 (0.0024)
G ID 93	7.000 (0.2756)	7.015 (0.2762)				7.030 (0.2768)	
G OD 81	6.328 (0.2491)	6.337 (0.2495)			6.320 (0.2488)		
			0.000 (0.0000)	0.022 (0.0009)			0.040 (0.0016)
G ID 80	6.337 (0.2495)	6.350 (0.2500)				6.360 (0.2504)	

Fits and Clearances (Ref. Fig. 610)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
G OD 91	7.956 (0.3132)	7.965 (0.3136)			7.947 (0.3129)		
			-0.015 -(0.0006)	0.017 (0.0007)			0.034 (0.0013)
G ID 92	7.950 (0.3130)	7.973 (0.3139)				7.981 (0.3142)	
G, A-A OD 97	6.324 (0.2490)	6.337 (0.2495)			6.290 (0.2476)		
			0.003 (0.0001)	0.074 (0.0029)			0.140 (0.0055)
G, A-A ID 96	6.340 (0.2496)	6.398 (0.2519)				6.430 (0.2531)	
G, A-A OD 96	12.722 (0.5009)	12.733 (0.5013)			12.713 (0.5005)		
			-0.018 -(0.0007)	0.019 (0.0007)			0.038 (0.0015)
G, A-A ID 98	12.715 (0.5006)	12.741 (0.5016)				12.751 (0.5020)	
G, A-A OD 96	12.722 (0.5009)	12.733 (0.5013)			12.707 (0.5003)		
			0.002 (0.0001)	0.033 (0.0013)			0.066 (0.0026)
G, A-A ID 99	12.735 (0.5014)	12.753 (0.5021)				12.773 (0.5029)	
G, A-A OD 96	12.722 (0.5009)	12.733 (0.5013)			12.707 (0.5003)		
			0.002 (0.0001)	0.033 (0.0013)			0.066 (0.0026)
G, A-A ID 100	12.735 (0.5014)	12.753 (0.5021)				12.773 (0.5029)	

Fits and Clearances (Ref. Fig. 610)

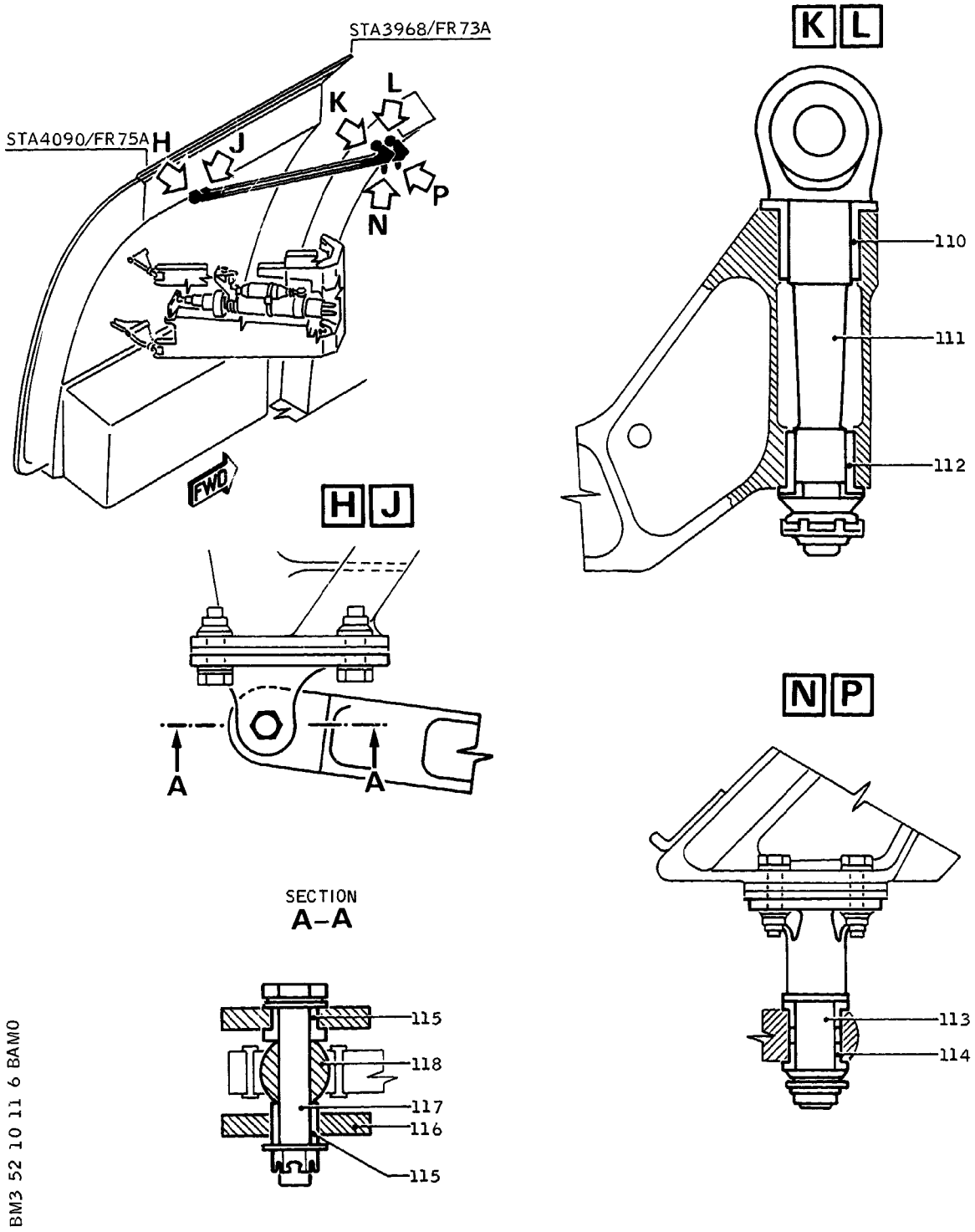
** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
G, A-A OD 102	6.324 (0.2490)	6.337 (0.2495)			6.300 (0.2480)		
			0.003 (0.0001)	0.070 (0.0028)			0.120 (0.0047)
G, A-A ID 101	6.340 (0.2496)	6.394 (0.2517)				6.420 (0.2528)	
G, A-A OD 101	12.722 (0.5009)	12.733 (0.5013)			12.707 (0.5003)		
			0.002 (0.0001)	0.033 (0.0013)			0.066 (0.0026)
G, A-A ID 103	12.735 (0.5014)	12.753 (0.5021)				12.773 (0.5029)	
G, A-A OD 101	12.722 (0.5009)	12.733 (0.5013)			12.707 (0.5003)		
			0.002 (0.0001)	0.033 (0.0013)			0.066 (0.0026)
G, A-A ID 104	12.735 (0.5014)	12.753 (0.5021)				12.773 (0.5029)	

Fits and Clearances
(Ref. Fig. 611)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
K, L OD 111	15.871 (0.6248)	15.882 (0.6253)			15.855 (0.6242)		
			0.011 (0.0004)	0.047 (0.0019)			1)
K, L ID 110	15.893 (0.6257)	15.918 (0.6267)				1)	
K, L OD 111	12.697 (0.4999)	12.705 (0.5002)			12.687 (0.4995)		
			0.010 (0.0004)	0.044 (0.0017)			1)
K, L ID 112	12.715 (0.5006)	12.741 (0.5016)				1)	
N, P OD 113	15.877 (0.6251)	15.888 (0.6255)			15.861 (0.6244)		
			0.005 (0.0002)	0.041 (0.0016)			1)
N, P ID 114	15.893 (0.6257)	15.918 (0.6267)				1)	



Upper and Lower Guide Arm Connections
Figure 611

Fits and Clearances (Ref. Fig. 611)

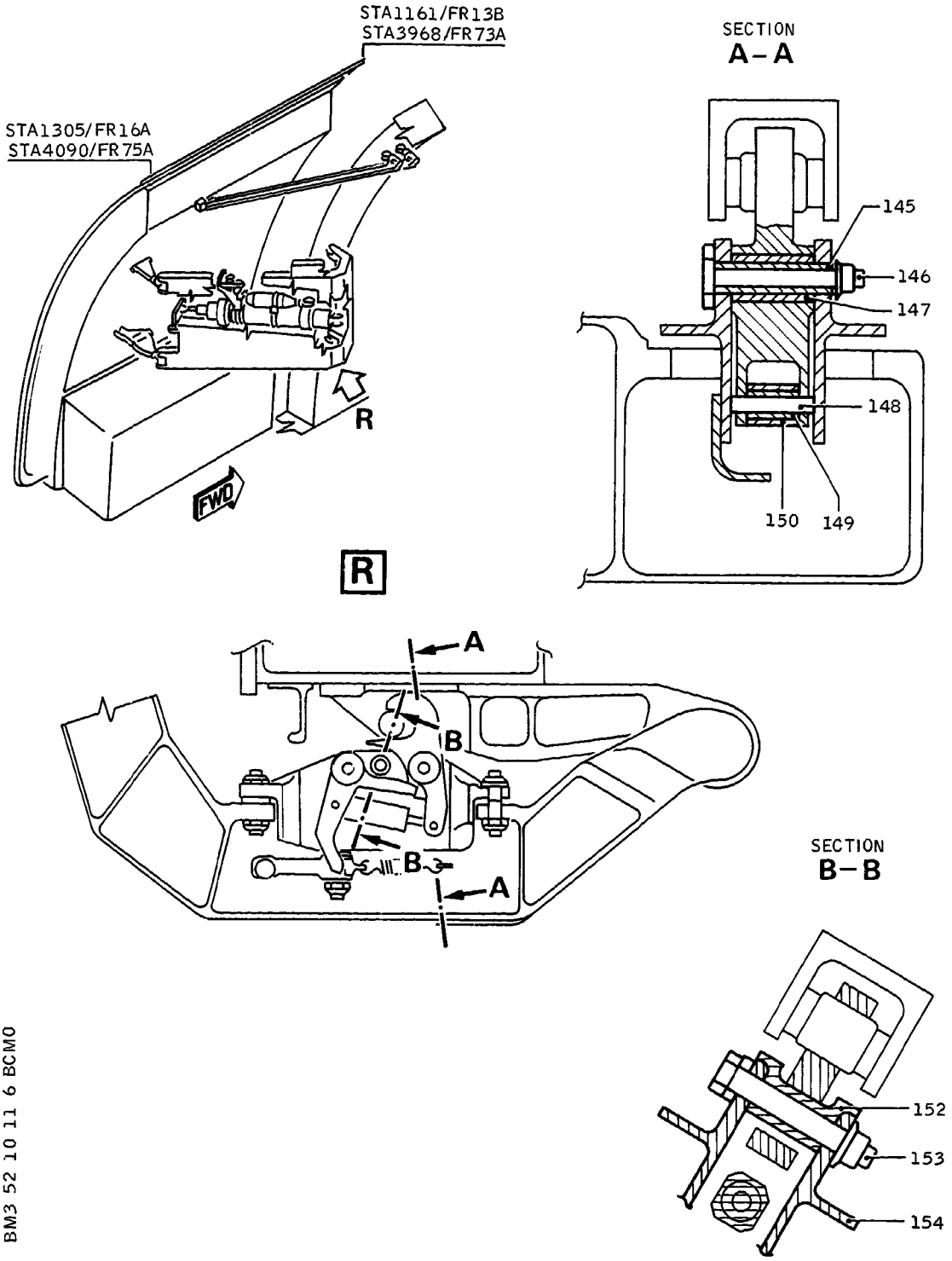
** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
H, J, A-A OD 117	6.324 (0.2490)	6.337 (0.2495)	0.005 (0.0002)	0.027 (0.0011)	6.306 (0.2483)		0.058 (0.0023)
H, J, A-A ID 115	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
H, J A-A OD 115	8.472 (0.3335)	8.487 (0.3341)	0.013 (0.0005)	0.043 (0.0017)	8.451 (0.3327)		0.085 (0.0033)
H, J A-A ID 116	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
H, J, A-A OD 117	6.324 (0.2490)	6.337 (0.2495)	0.000 (0.0000)	0.026 (0.0010)	6.306 (0.2483)		1)
H, J, A-A ID 118	6.337 (0.2495)	6.350 (0.2500)				1)	

Fits and Clearances
(Ref. Fig. 612)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
R, A-A OD 145	7.956 (0.3132)	7.965 (0.3136)			7.947 (0.3129)		
			-0.015 -(0.0006)	0.017 (0.0007)			0.034 (0.0013)
R, A-A ID 147	7.950 (0.3130)	7.973 (0.3139)				7.981 (0.3142)	
R, A-A OD 146	4.800 (0.1890)	4.813 (0.1895)			4.793 (0.1887)		
			-0.001 -(0.0004)	0.028 (0.0011)			0.042 (0.0017)
R, A-A ID 145	4.812 (0.1894)	4.828 (0.1901)				4.835 (0.1904)	
R, A-A OD 148	3.992 (0.1572)	4.000 (0.1575)			3.987 (0.1570)		
			0.000 (0.0000)	0.020 (0.0008)			0.030 (0.0012)
R, A-A ID 149	4.000 (0.1575)	4.012 (0.1580)				4.017 (0.1581)	
R, A-A OD 149	5.992 (0.2359)	6.000 (0.2362)			5.987 (0.2357)		
			0.000 (0.0000)	0.020 (0.0008)			0.030 (0.0012)
R, A-A ID 150	6.000 (0.2362)	6.012 (0.2367)				6.017 (0.2369)	
R, B-B OD 153	6.324 (0.2490)	6.337 (0.2495)			6.310 (0.2484)		
			0.001 (0.00003)	0.026 (0.0010)			0.055 (0.0022)
R, B-B ID152/ 154	6.338 (0.2495)	6.350 (0,2500)				6.365 (0.2506)	

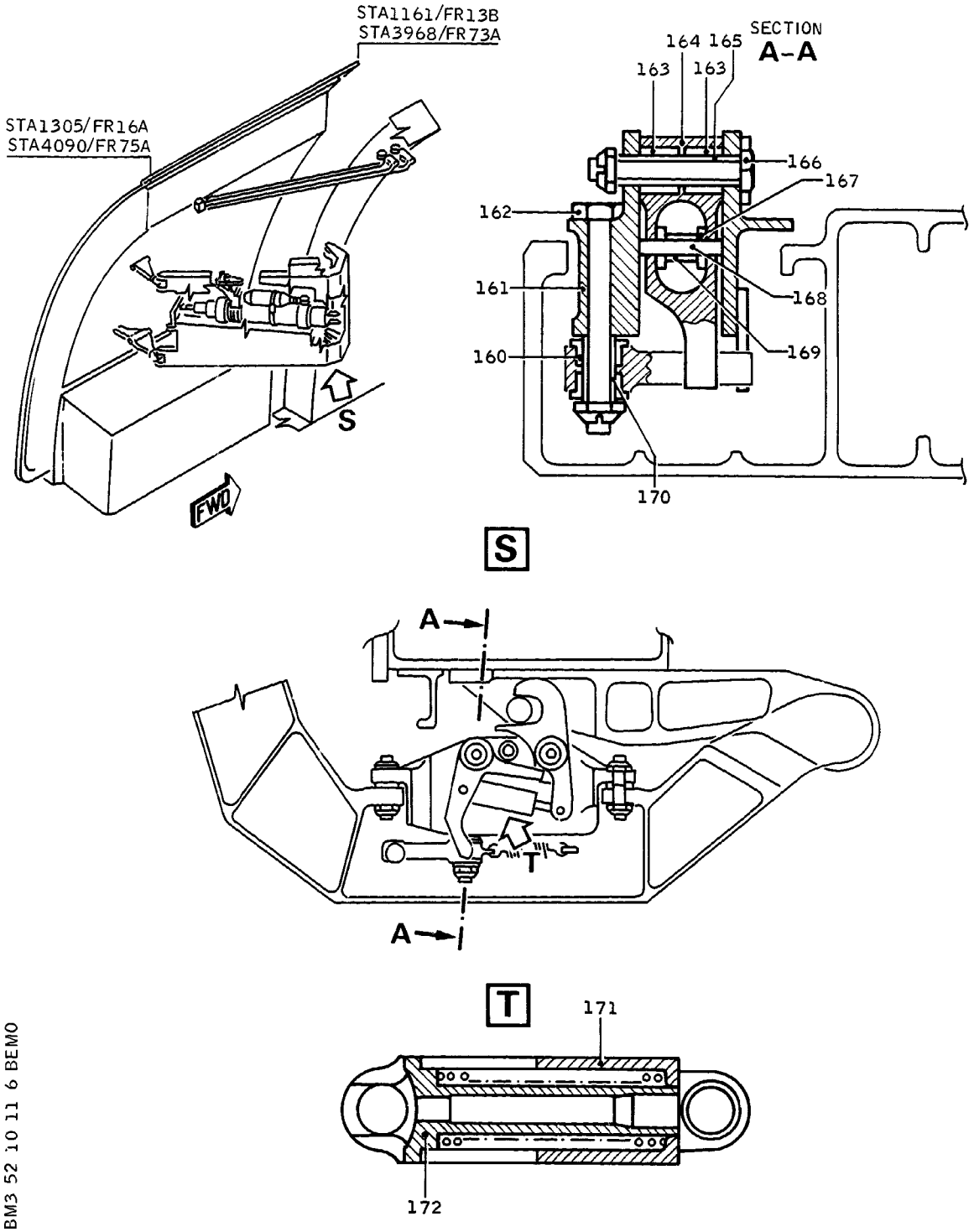


Door Stay Mechanism
Figure 612

Fits and Clearances
(Ref. Fig. 613)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimensions mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
S, A-A OD 162	6.324 (0.2490)	6.337 (0.2495)			6.320 (0.2488)		
			-0.022 -(0.0009)	0.008 (0.0003)			0.015 (0.0006)
S, A-A ID 170	6.315 (0.2486)	6.332 (0.2493)				6.335 (0.2494)	
S, A-A OD 170	7.956 (0.3132)	7.965 (0.3136)			7.947 (0.3129)		
			-0.015 -(0,0006)	0.017 (0.0007)			0.034 (0.0013)
S, A-A ID 160	7.950 (0.3130)	7.973 (0.3139)				7.981 (0.3142)	
S, A-A OD 162	6.324 (0.2490)	6.337 (0.2495)			6.314 (0.2486)		
			0.001 (0.00003)	0.029 (0.0011)			0.050 (0.0020)
S, A-A ID 161	6.338 (0.2495)	6.353 (0.2501)				6.364 (0.2506)	
S, A-A OD 165	7.956 (0.3132)	7.965 (0.3136)			7.947 (0.3129)		
			-0.015 -(0.0006)	0.017 (0.0007)			0.034 (0.0013)
S, A-A ID 163	7.950 (0.3130)	7.973 (0.3139)				7.981 (0.3142)	
S, A-A OD 166	4.800 (0.1890)	4.813 (0.1895)			4.793 (0.1887)		
			-0.001 -(0.0003)	0.028 (0.0011)			0.042 (0.0017)
S, A-A ID 165	4.812 (0.1894)	4.828 (0.1901)				4.835 (0.1904)	



BM3 52 10 11 6 BEMO

Door Stay Mechanism
Figure 613

Fits and Clearances (Ref. Fig. 613)

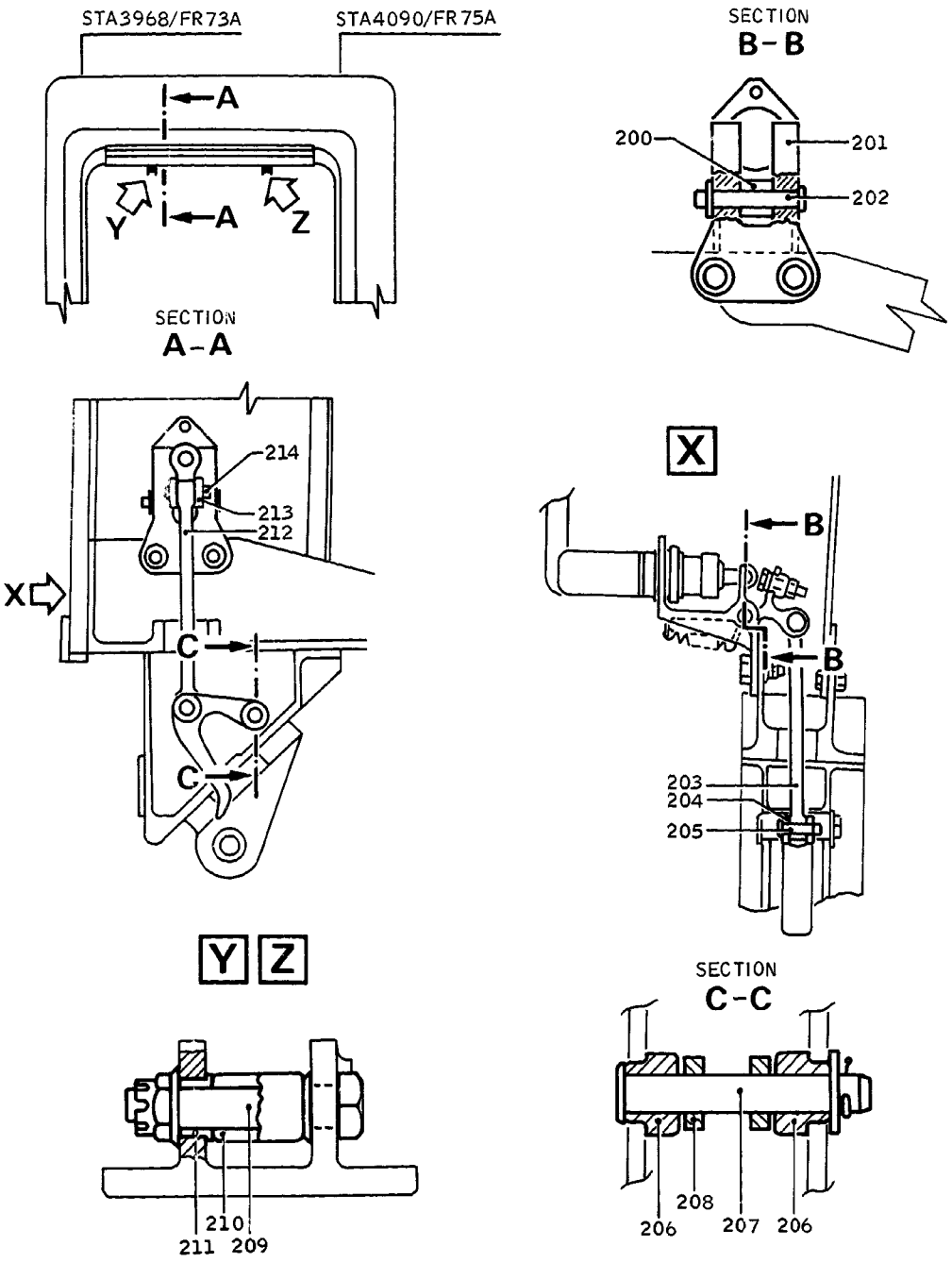
** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
S, A-A OD 169	5.992 (0.2359)	6.000 (0.2362)			5.982 (0.2355)		
			0.000 (0.0000)	0.020 (0.0008)			0.040 (0.0016)
S, A-A ID 167	6.000 (0.2362)	6.012 (0.2367)				6.022 (0.2371)	
S, A-A OD 168	3.992 (0.1572)	4.000 (0.1575)			3.982 (0.1568)		
			0.000 (0.0000)	0.020 (0.0008)			0.040 (0.0016)
S, A-A ID 169	4.000 (0.1575)	4.012 (0.1580)				4.022 (0.1576)	
T OD 172	9.978 (0.3928)	9.978 (0.3928)			9.960 (0.3921)		
			0.013 (0.0005)	0.037 (0.0015)			0.070 (0.0028)
T ID 171	10.000 (0.3937)	10.015 (0.3943)				10.030 (0.3949)	
T OD 171	5.982 (0.2355)	5.990 (0.2358)			5.965 (0.2348)		
			0.010 (0.0004)	0.035 (0.0014)			0.070 (0.0028)
T ID 172	6.000 (0.2362)	6.012 (0.2367)				6.035 (0.2376)	

Fits and Clearances
(Ref. Fig. 614)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A-A OD 214	6.247 (0.2459)	6.299 (0.2480)			6.155 (0.2423)		
			0.051 (0.0020)	0.118 (0.0046)			0.231 (0.0091)
A-A ID 213	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
A-A OD 214	6.247 (0.2459)	6.299 (0.2480)			6.155 (0.2423)		
			0.101 (0.0040)	0.453 (0.0178)			0.695 (0.0274)
A-A ID 212	6.400 (0.2520)	6.700 (0.2638)				6.850 (0.2697)	
B-B OD 202	6.247 (0.2459)	6.299 (0.2480)			6.115 (0.2423)		
			0.051 (0.0020)	0.118 (0.0046)			0.231 (0.0091)
B-B ID 201	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
B-B OD 202	6.247 (0.2459)	6.299 (0.2480)			6.155 (0.2423)		
			0.051 (0.0020)	0.118 (0.0046)			0.231 (0.0091)
B-B ID 200	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
X OD 205	6.247 (0.2459)	6.299 (0.2480)			6.155 (0.2423)		
			0.051 (0.0020)	0.118 (0.0046)			0.231 (0.0091)
X ID 204	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	



BM3 52 10 11 6 BGM0

Actuating Unit for Door Warning Limit Switch
(AFT Passenger/Crew Doors)
Figure 614

Fits and Clearances (Ref. Fig. 614)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm (in.) Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm (in.) Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm (in.)
X OD 205	6.247 (0.2459)	6.299 (0.2480)			6.155 (0.2423)		
			0.101 (0.0040)	0.453 (0.0178)			0.695 (0.0274)
X ID 203	6.400 (0.2520)	6.700 (0.2638)				6.850 (0.2697)	
C-C OD 207	6.247 (0.2459)	6.299 (0.2480)			6.155 (0.2423)		
			0.051 (0.0020)	0.118 (0.0046)			0.231 (0.0091)
C-C ID 208	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
C-C OD 207	6.247 (0.2459)	6.299 (0.2480)			6.155 (0.2423)		
			0.051 (0.0020)	0.118 (0.0046)			0.231 (0.0091)
C-C ID 206	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
Y, Z OD 209	9.424 (0.3710)	9.500 (0.3740)			9.374 (0.3691)		
			0.025 (0.0010)	0.116 (0.0046)			0.222 (0.0087)
Y, Z ID 210	9.525 (0.3750)	9.540 (0.3756)				9.596 (0.3778)	
Y, Z OD 209	9.424 (0.3710)	9.500 (0.3740)			9.374 (0.3691)		
			0.025 (0.0010)	0.116 (0.0046)			0.187 (0.0074)
Y, Z ID 211	9.525 (0.3750)	9.540 (0.3756)				9.561 (0.3764)	

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS. (REF. 52-10-00, PAGE BLOCK 301).

NOTE : The LH and RH door suspension are identical in design and function but are opposite hand. The LH door suspension only is described and illustrated.

1. Reason for the Job

A. Adjustment of support arm and connection links

B. Adjustment of upper and lower guide arm

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.20 to 4.40 m (13.8 to 14.5 ft.)
B. 98A52108004000	Hoisting Sling - Passenger/Crew Doors, LH and RH
C. 98A52108007000	Tool Set - R/I MID and AFT Passenger/Crew Doors
or 98A52108007001	Tool Set - R/I AFT Passenger/Crew Doors
D. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
or 98A52108008001	Support Frame - Ballast Weight, Doors
	NOTE : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
E.	Torque Wrench, 0 to 0.7 m. daN (0 to 62 lbf.in.)
F.	Measuring Tools
G.	Crane
H.	Steel Laminated Shims
J.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.025 in.)
K. Material No. 05-002	Special Materials (Ref. 20-31-00)
L. Material No. 05-027	Special Materials (Ref. 20-31-00)
M. Material No. 05-052	Special Materials (Ref. 20-31-00)
N. Material No. 16-001	Structure Paints (Ref. 20-31-00)
P. Material No. 16-002	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 11-20-00, P. Block 1	Exterior Placards and Markings
- 25-23-41, P. Block 401	Door Frame Lining
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-14, P. Block 501	FWD, AFT Door Damper and Emergency Operation Cylinder
- 52-11-11, P. Block 401	FWD Passenger/Crew Door
- 52-13-11, P. Block 401	AFT Passenger/Crew Door

3. Procedure

A. Adjustment of Support Arm and Connection Links

(1)Job Set-Up

(Ref. Fig. 501)

(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).

(c)Open door.

(d)Remove door lining and insulation (Ref. 53-10-13, P. Block 401).

(e)Remove door frame linings as required (Ref. 25-23-41, P. Block 401).

(f)Remove either container with double escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).

(g)Remove adhesive patches (3) and hoisting lugs (2) and reinstall hoisting lugs (2) in reverse position.

(h)Attach sling (1) to hoisting lugs (2) and crane.

R (j)Install ballast weight assy PN 98A52108008000 or support frame
R PN 98A52108008001 with the appropriate ballast weight.

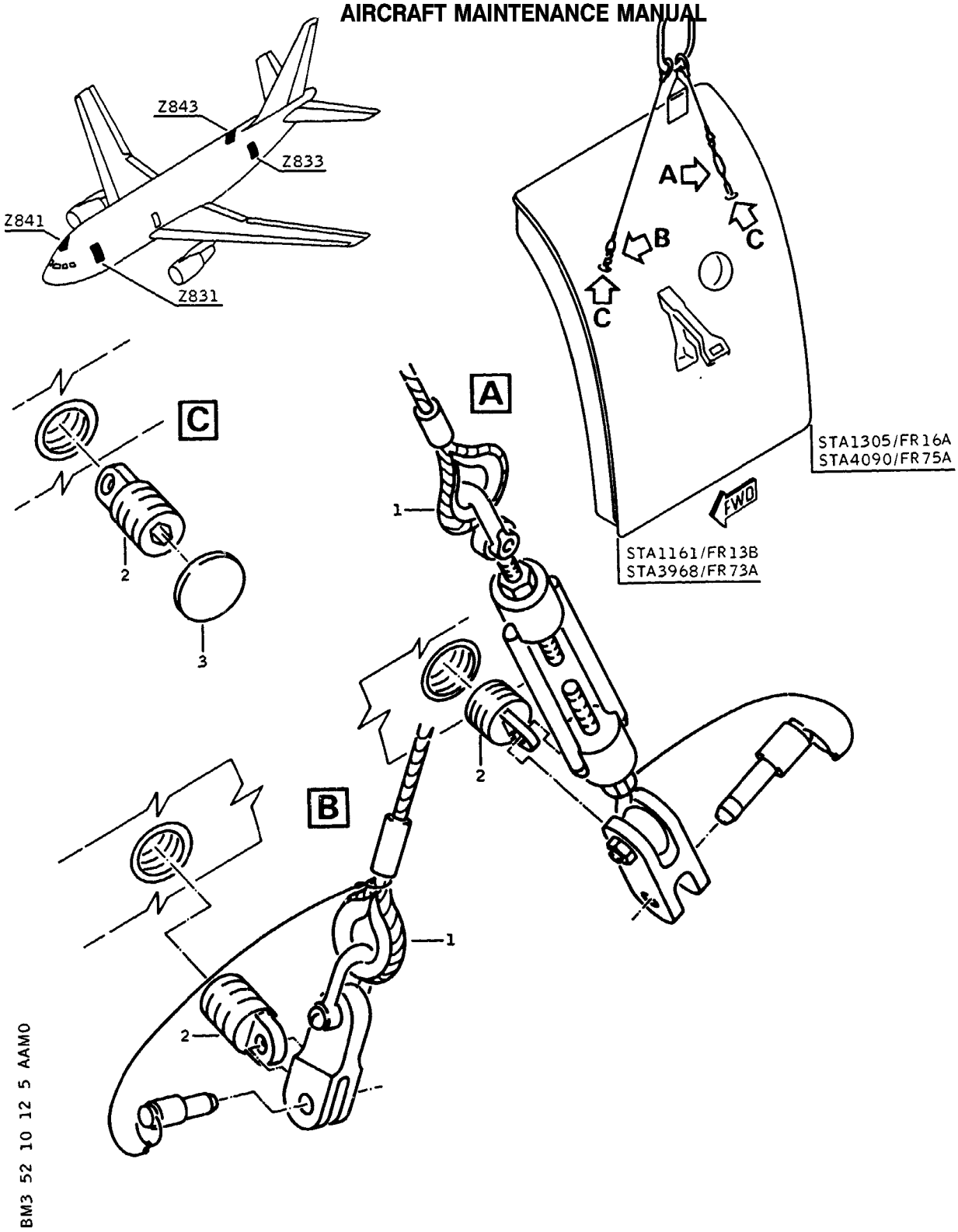
(2)Adjustment

(Ref. Fig. 501)
(Ref. Fig. 502)
(Ref. Fig. 503)
(Ref. Fig. 504)

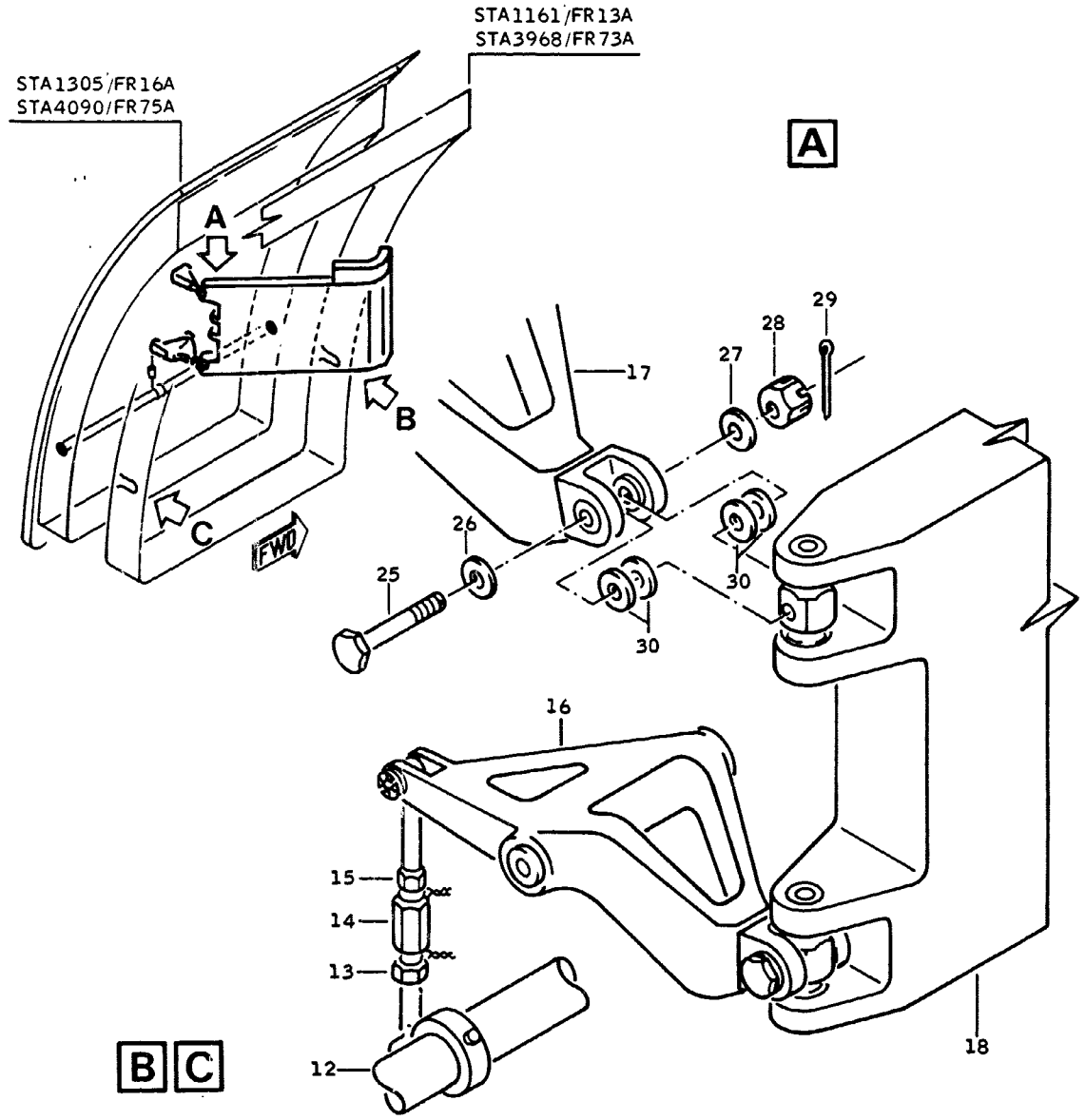
(a)Adjust length of rod (14) between lifting shaft (12) and lower connection link (16) such that lifting shaft rollers (11) centrally engage with LH and RH roller fittings (10) of fuselage door frame. The misalignment of each roller (11) must not exceed ± 0,5 mm (0,02 in.).

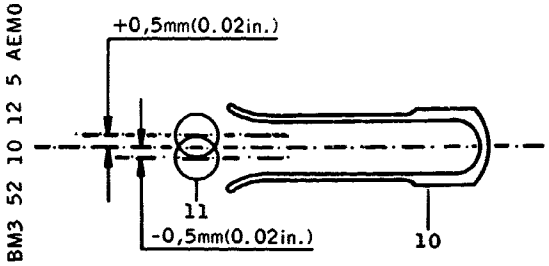
(b)TORQUE upper and lower nut (13,15) of rod (14) with wrench PN 98A52108007013 to between 0.6 and 0.7 mdaN (53-62 lbf.in.) and secure with lockwire against twisting.

(c)If the permissible misalignment exceeds the limit in step (a), insert washers (30) between connection levers of upper and lower connection links (16),(17) and bearing journal of support arm connection levers as follows :



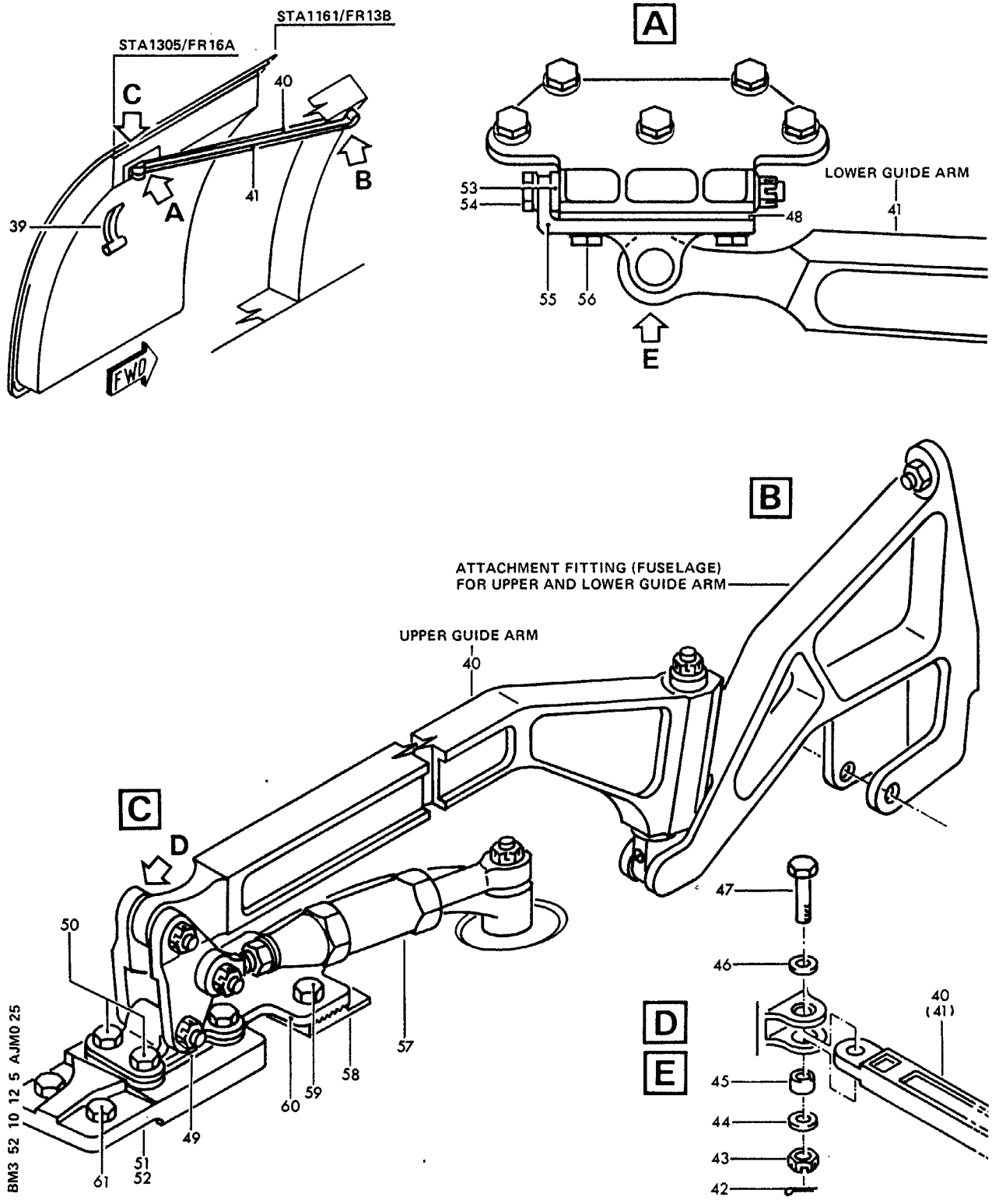
FWD and AFT Pass./Crew Doors Sling
Figure 501



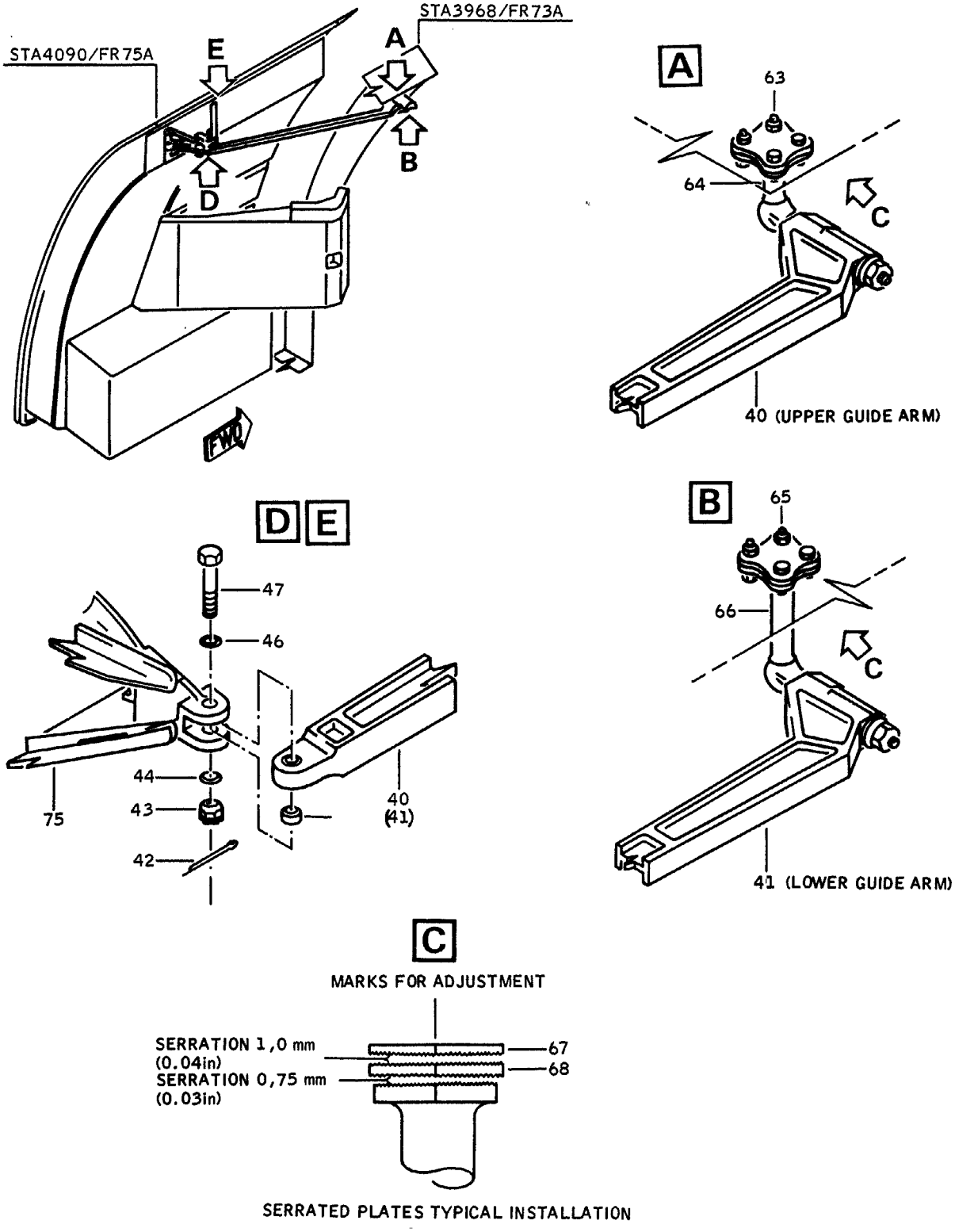


NOTE: TYPICAL CONNECTION LINK INSTALLATION, UPPER AND LOWER IS IDENTICAL.

FWD and AFT Pass./Crew Doors - Support Arm/
Connection Links
Figure 502



FWD Pass./Crew Doors - Upper and Lower Guide Arms
Figure 503



BM3 52 10 12 5 ANMO

AFT Pass./Crew Doors - Upper and Lower Guide Arms
Figure 504

1 Using hoisting sling (1) lift door sufficiently to unload support arm.

2 Disconnect upper and lower guide arm (40),(41) from door by removing cotter pin (42), nut (43), washers (44),(46), bolts (47) and plain bush (45).
3 Remove upper bolt (25) by removing cotter pin (29), nut (28) and washers (27),(26). Remove adjustment washers (30) and retain thick washers.
4 Select new adjustment washers (30) and install with thick washers.
NOTE : Make certain that clearance between adjustment washers (30) and connection links (16),(17) is between 0 and 0.1 mm (0 and 0.0039 in.)
(Ref. FWD doors 52-11-11, P. Block 401
AFT doors 52-13-11, P. Block 401
5 Install bolt (25) with washers (26, 27) and nut (28).

** ON FWD PASSENGER/CREW DOORS

6 Tighten nut (28).

** ON AFT PASSENGER/CREW DOORS

6 TORQUE nut (28) to max. 0.59 m.daN (52.2 lbf.in.) and back off to next cotter pin hole.

** ON FWD AND AFT PASSENGER/CREW DOORS

7 If the misalignment exceeds the limit in step (a) adjust lower support arm connection according step 2 thru 6.
8 Secure nut (28) with cotter pin (29).
9 Install upper and lower guide arm (40),(41) with plain bush (45), bolt (47), washers (46),(44) and nut (43). Fit cotter pin (42).
(d)Check and adjust upper and lower guide arm and refer to para B.
(e)Check and adjust upper and lower guide fittings. (Ref. 52-10-11, P. Block 501).
(f)Check and adjust girt bar fittings. (Ref. 52-10-11, P. Block 501).
(g)Check and adjust door latches. (Ref. 52-10-11, P. Block 501).
(h)Check and adjust door damper and emergency operation cylinder. (Ref. 52-10-14, P. Block 501).
(i)Coat projecting thread ends and bolt heads as follows :
1 For bolts attaching parts directly to door structure use polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
2 For bolts in mechanism use Mastinox (Material No.05-002).

(3)Test
(a)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(b)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material 05-027).
(c)Install door lining and insulation (Ref. 52-10-13, P. Block 401).
(d)Install door frame linings where removed (Ref. 25-23-41, P. Block 401).
R (e)Remove ballast weight assy PN 98A52108008000 or support frame
R PN98A52108008001 with the appropriate ballast weight.
(f)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
(g)Close door and observe the following:
1 No chafing of door lining.
2 Smooth door closing.
3 Free movement of emergency control handle.
4 Engagement of sliders in girt bar fittings.
(h)Measure force required to operate interior control handle. Operating force must not exceed 16daN (36 lbf.).
R (j)Measure force required to operate emergency control handle. Operating force must not exceed 10daN (22 lbf.).
R (k)Open door and lock in open position.
(4)Close-Up

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(a)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(b)Remove hoisting sling (1).
(c)Remove hoisting lugs (2) and reinstall in reverse position.
(d)Install adhesive patches (3) (Material No. 05-052) over hoisting points (Ref. 11-20-00, P. Block 1).
(e)Close door.
(f)Remove access platform.

B. Adjustment of Upper and Lower Guide Arm
(1)Job Set-Up
(a)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(b)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(c)Open door.
(d)Remove guide arm lining (Ref. 52-10-13, P. Block 401).
(e)Remove door frame linings as required (Ref. 25-23-41, P. Block 401).

(2)Adjustment

** ON FWD PASSENGER/CREW DOORS

(Ref. Fig. 503)

(a)Close door such that interior control handle (39) is in its middle position.

(b)Remove cotter pin (42) and loosen nut (43) of lower guide arm (41) attachment bolt (47) to door attachment fitting (55).

(c)Check that bolt (47) can be moved smoothly.

(d)If smooth movement of bolt (47) is not obtained, proceed as follows:

1 Loosen bolts (56).

2 Remove bolt (54) and select appropriate shims (48),(53) to obtain smooth movement of screw (47).

3 Install bolt (54) and shims (48),(53).

4 Tighten bolts (56).

5 Check smooth movement of bolt (47).

(e)TORQUE nut (43) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.

(f)Install cotter pin (42).

(g)Close door such that interior control handle (39) is in its middle position.

(h)Remove cotter pin (42) and loosen nut (43) of upper guide arm (40) attachment bolt (47) to door attachment fitting (60).

(i)Check that bolt (47) can be moved smoothly.

(j)If smooth movement of bolt (47) is not obtained, proceed as follows:

1 Remove nuts (52), washers (51) and bolts (50),(59).

NOTE : Identify location of attachment fitting (60) on serrated plate (58).

2 Move attachment fitting (60) away from serrated plate (58) and shim (49).

3 Adjust shim (49) as necessary.

4 Locate attachment fitting (60) on shim (49) and serrated plate (58).

5 Install bolts (59) and handtighten.

6 Install bolts (50), washers (51) and nuts (52), handtighten nuts (52).

7 TORQUE nuts (52) to between 0.70 and 0.80 m.daN (62 and 71 lbf.in.).

8 Tighten bolts (59).

9 Check that bolt (47) can be moved smoothly.

10 Close door to a position slightly bearing against seal and adjust spring rod cylinder (57) by its eye end fitting, if necessary.

(k)TORQUE nut (43) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.

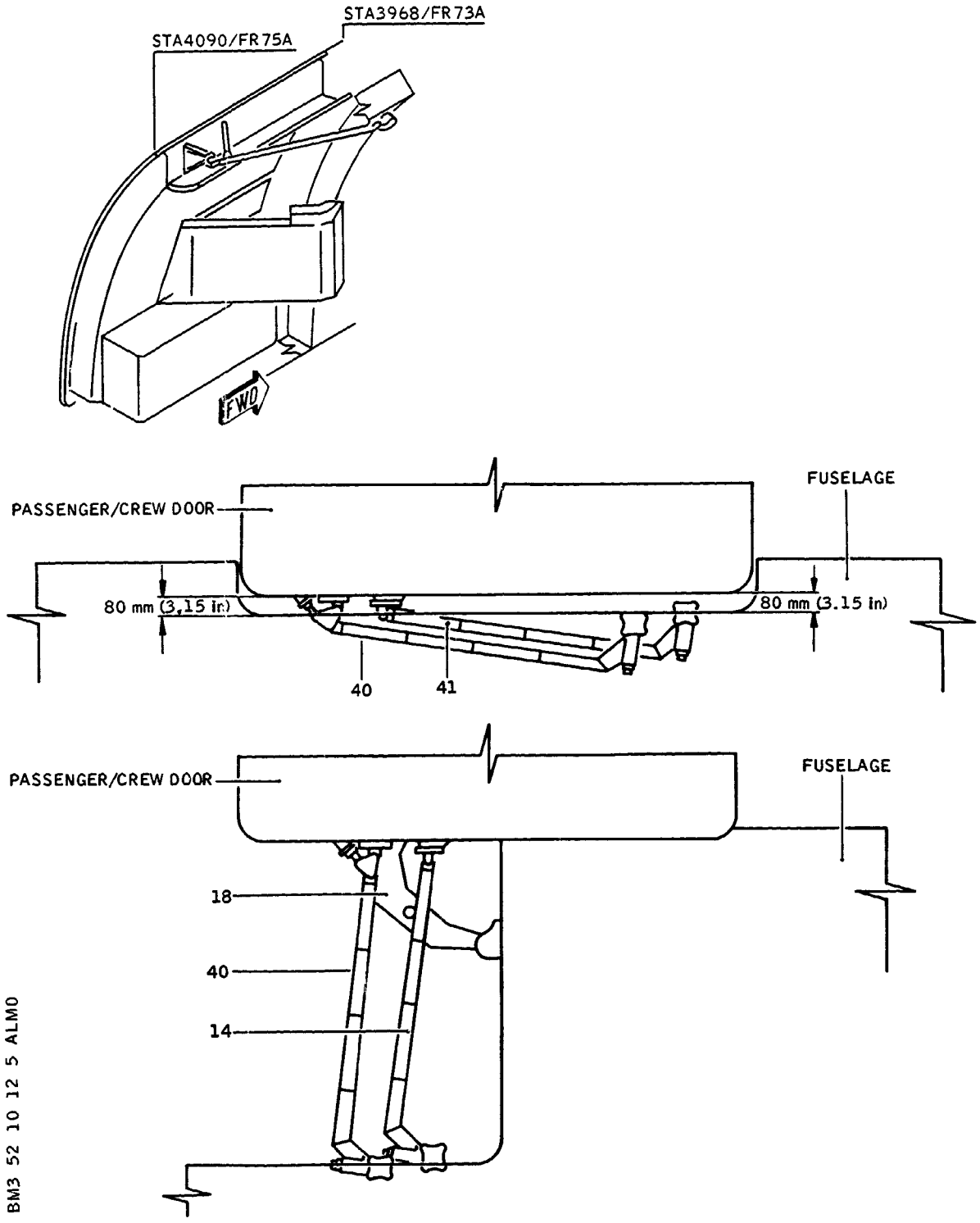
(l)Install cotter pin (42).

** ON AFT PASSENGER CREW DOORS

(Ref. Fig. 504)
(Ref. Fig. 505)
(m)Open door.
(n)Remove lower guide arm (41) from door attachment fitting (75) by removing cotter pin (42), nut (43), bolt (47), washers (44,46) and plain bush (45).
(o)Close door until it extends approx. 80 mm (3.15 in.) from fuselage skin.
(p)Measure distance between forward and aft edges of door and fuselage at approx. horizontal door center line.
NOTE : Allowable tolerance between distances is 3.0 mm (0.12 in.).
(q)If allowable tolerance is exceeded, proceed as follows :
1 Loosen bolts (63) of upper guide arm fitting (fuselage) (64).
2 Move upper guide arm fitting (64) on serrated plates (67),(68) until distance per step (p) is obtained.
3 TORQUE bolts (63) to 0.45-0.5 m. daN (40-44 lbf.in.).
(r)Set door to position per step (o).
(s)Install lower guide arm (41) to door attachment fitting (75).
1 Install plain bush (45), washers (44),(46), bolt (47) and nut (43).
2 Check that bolt (47) can be installed smoothly.
a If smooth bolt (47) installation is not obtained loosen bolts (65) of lower guide arm fitting (66) and move on serrated plates (67),(68) until smooth bolt (47) installation is reached.
b TORQUE bolts (65) of lower guide arm fitting (66) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(t)TORQUE nut (43) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(u)Install cotter pin (42).

** ON FWD AND AFT PASSENGER/CREW DOORS

(v)Coat projecting thread ends and bolt heads as follows :
1 For bolts attaching parts directly to door structure use polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
2 For bolts in mechanism use Mastinox (Material No. 05-002).



AFT Pass./Crew Doors - Adjustment Positions
Figure 505

(3)Test
  (a)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
  (b)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
  (c)Install guide arm lining (Ref. 52-10-13, P. Block 401).
  (d)Install door frame linings where removed (Ref. 25-23-41, P. Block 401).
  (e)Close door and observe the following :
    1 No chafing of door lining.
    2 Smooth door closing.
(4)Close-Up
  (a)Open door.
    WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
  (b)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
  (c)Close door.
  (d)Remove access platform.

FWD, AFT DOOR SUSPENSION - INSPECTION/CHECK

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS. (REF. 52-10-00, P. BLOCK 301).

R CAUTION : PERCENTAGE (%) OF ALLOWABLE DAMAGE IS ALWAYS RELATED TO NOMINAL
R MATERIAL THICKNESS AS SPECIFIED IN SRM (STRUCTURAL REPAIR MANUAL)

NOTE : Should crack formation be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

NOTE : The LH and RH door suspension are identical in design and function but are opposite hand. The LH door suspension only is described and illustrated.

1. Reason for the Job

A. To monitor the condition of the following :
(1)Support arm and connection links
(2)Upper and lower guide arms
NOTE : Items correspond with operations in 3.B.

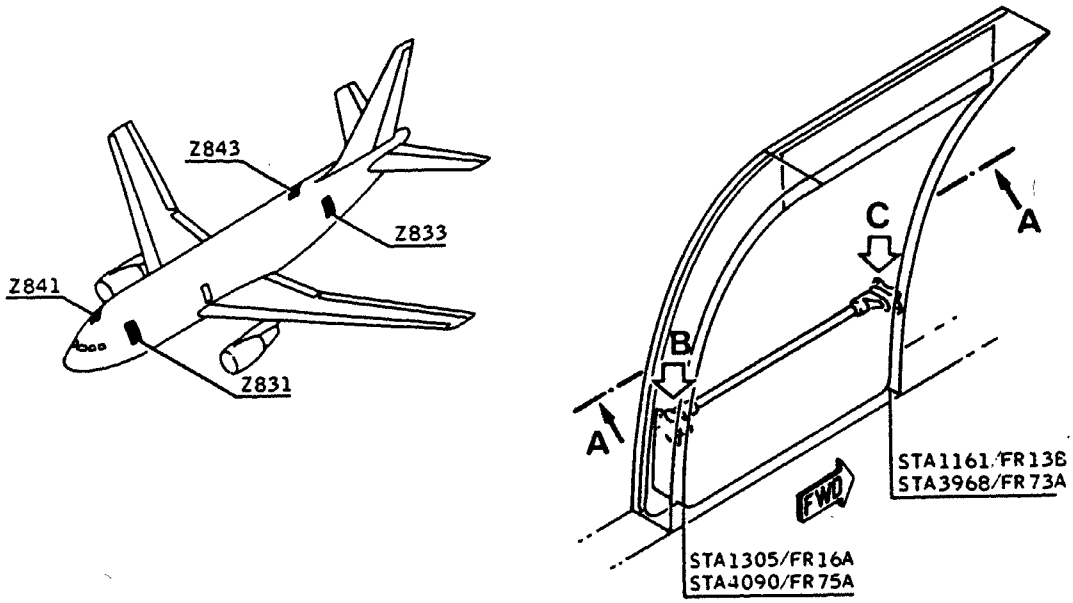
2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.60 to 5.20 m (15 to 17 ft.)
B. 98A52108009000	Milling and Crimping Device - Passenger/Crew Doors - Guide Arm Bearings
C.	Measuring Instruments
D.	Inspection Mirror
E.	Magnifying Glass 10 Fold
F.	Torch
G. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 25-23-41, P. Block 401	Door Frame Lining
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-12, P. Block 501	FWD, AFT Door Suspension
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-13-12, P. Block 401	AFT Door Suspension
R	Structural Repair Manual

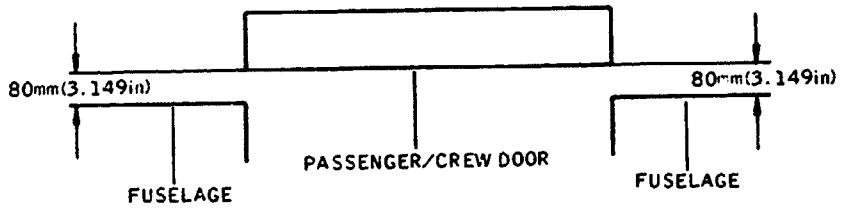
3. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open door.
(4)Remove door frame linings when necessary and support arm and guide arm lining for inspection of support arm and connection links (Ref. 25-23-41, P. Block 401) (Ref. 52-10-13, P. Block 401).

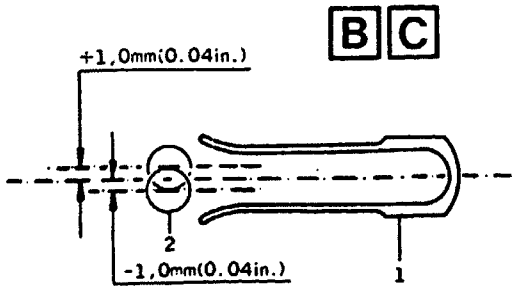
B. Inspection
(1)Support arm and connection links
(a)Visually check for
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801).
a Determine repair in accordance with diagram.
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Tight fit.
(b)Measurement
(Ref. Fig. 601)
1 Close passenger/crew door and check smooth movement of lifting shaft rollers (2) in roller fittings (1) at fuselage door frame. The sum of the misalignment at both rollers (2) must not exceed 1 mm (0.04 in.).
(For Adjustment Ref. 52-10-12, P. Block 501).
(2)Upper and lower guide arms (Ref. Fig.)
(a)Visually check for
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents. (Ref. 51-73-10, P. Block 801)
a Determine repair in accordance with diagram.
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Tight fit.
NOTE : Where self aligning bearing in guide arm is found to be damaged on AFT doors, proceed as follows:
a. Remove guide arm (Ref. 52-13-12, P. Block 401).
b. Replace bearing using tool 98A52108009000.
c. Refit guide arm (Ref. 52-13-12, P. Block 401).
(b)Measurement (Ref. Fig. 601)
1 Check door for proper opening and closing by loading door front or rear edges.
a When opening door pull at door rear edge.
b When closing door pull at door front edge.
2 Check position of door as follows :
a Open door until it extends approx. 80 mm (3.15 in.) from fuselage outer skin.
b Check that parallel tolerance is 3 mm (0,12 in.) maximum. (Ref. 52-10-12, P. Block 501).



SECTION
A-A



NOTE: 3mm(0.12in) OUT OF PARALELL TOLERANCE PERMISSIBLE



BM3 52 10 12 6 ACM0

Door Position and
Permissible Misalignment of Rollers
Figure 601

Printed in France

C. Close-Up

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).

(3)Install door frame lining and support arm lining. (Ref. 25-23-41, P. Block 401) (Ref. 52-10-13, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(4)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).

(5)Close door.

(6)Remove access platform.

FWD, AFT DOOR LINING AND INSULATION - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, PAGE BLOCK 301).

NOTE : The LH and RH door lining and insulation are identical in design and function but are opposite hand. The LH door lining and insulation only is described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.60 to 5.20 m (15 to 17 ft.)
B.	Torque Wrench, 0.25 to 0.35 m.daN (22 to 31 lbf.in.)
C. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 11-00-00, P. Block 1	Placards and Markings - General
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft

**ON A/C 001-003,

- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-73-11, P. Block 401	Warning Light
- 52-73-12, P. Block 401	Warning Horn
- 52-73-14, P. Block 401	Test Switch

2. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open passenger/crew door.

B. Removal

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

- 52-10-00, P. Block 301 Passenger/Crew Doors - Special Precautions
- 52-73-11, P. Block 401 Warning Light
- 52-73-12, P. Block 401 Warning Horn
- 52-73-14, P. Block 401 Test Switch
- 52-73-15, P. Block 401 Residual Pressure Warning Light

2. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open passenger/crew door.

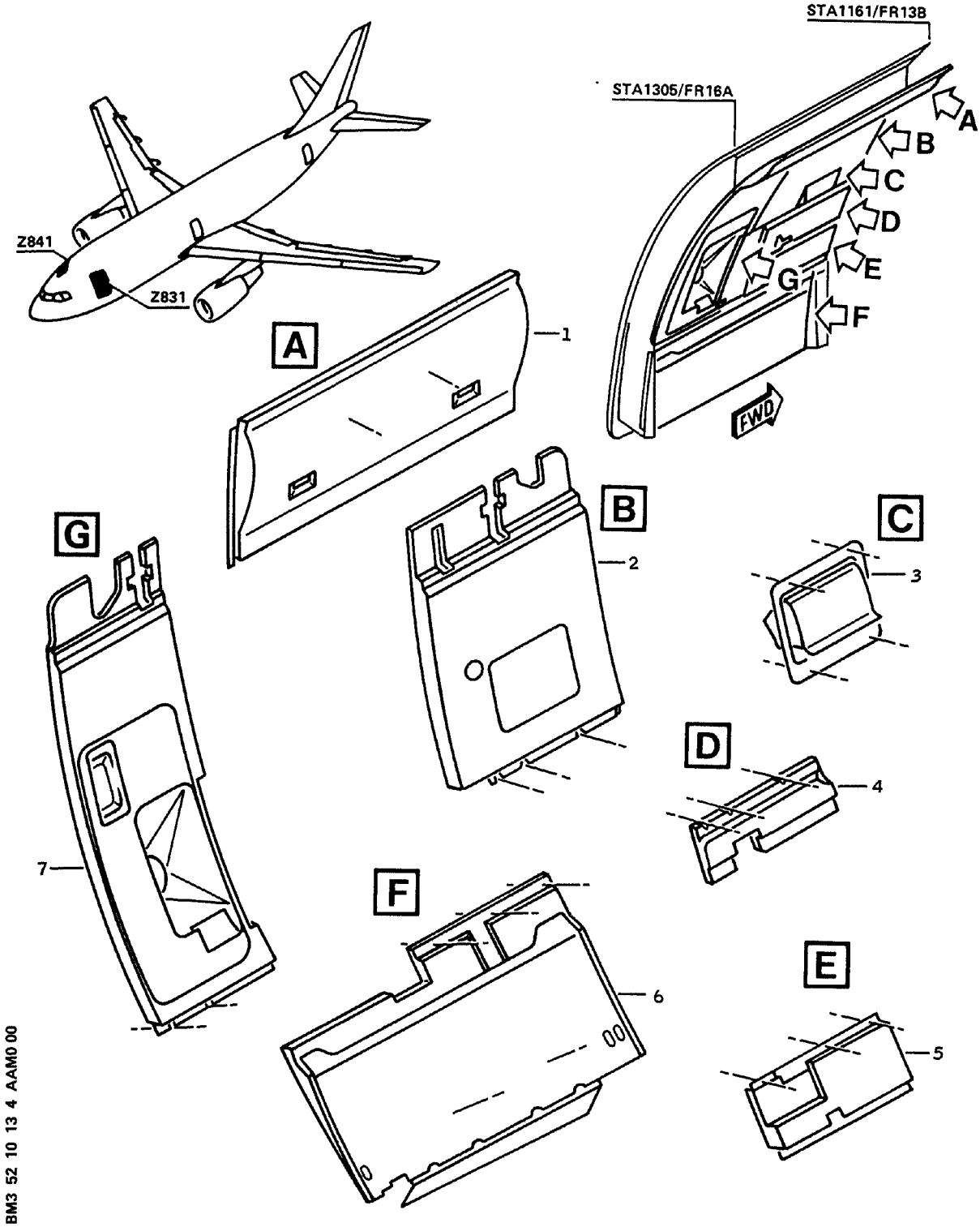
B. Removal

**ON A/C ALL

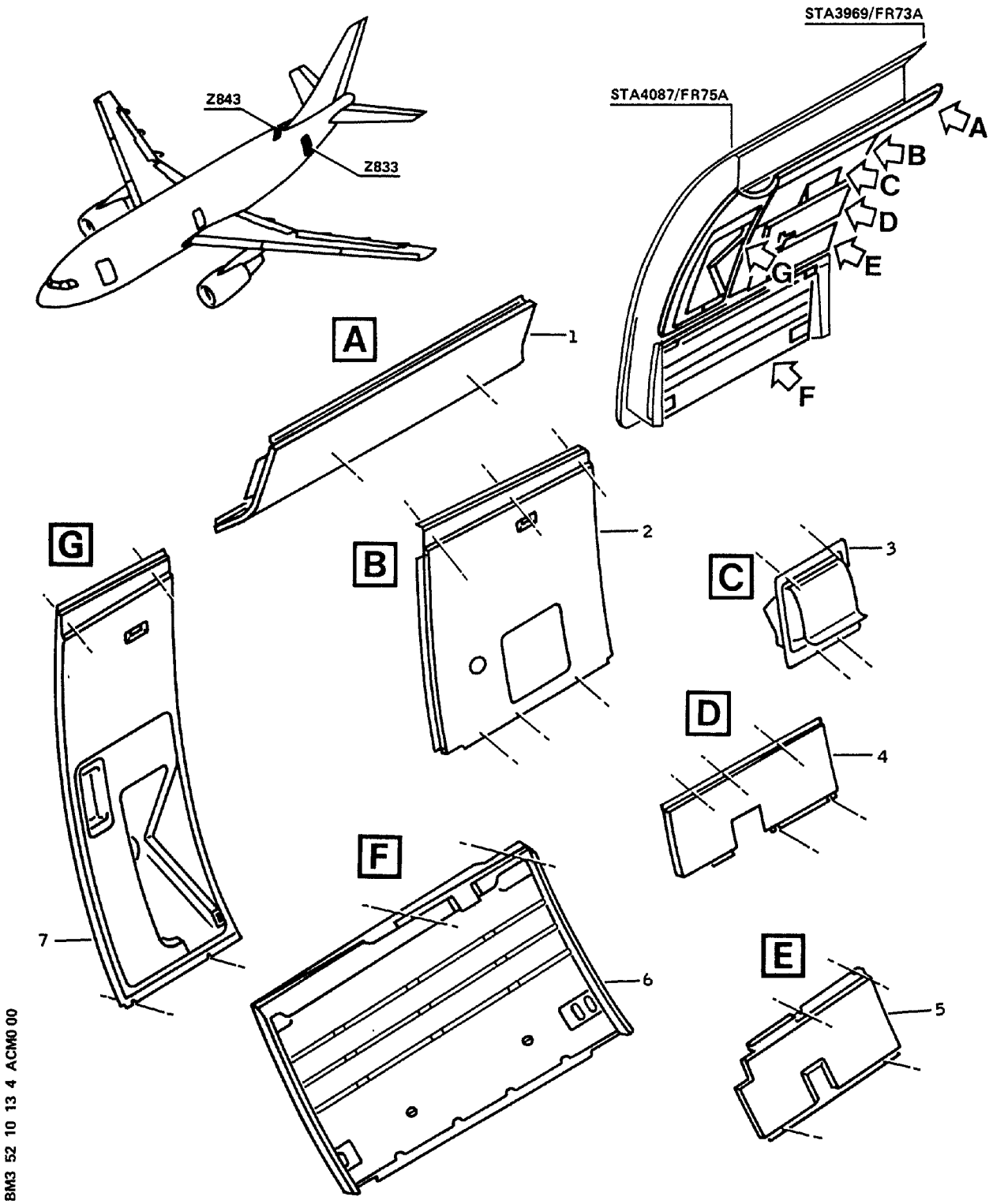
(Ref. Fig. 401)
(Ref. Fig. 402)
(Ref. Fig. 403)
(Ref. Fig. 404)

**ON A/C 001-003,

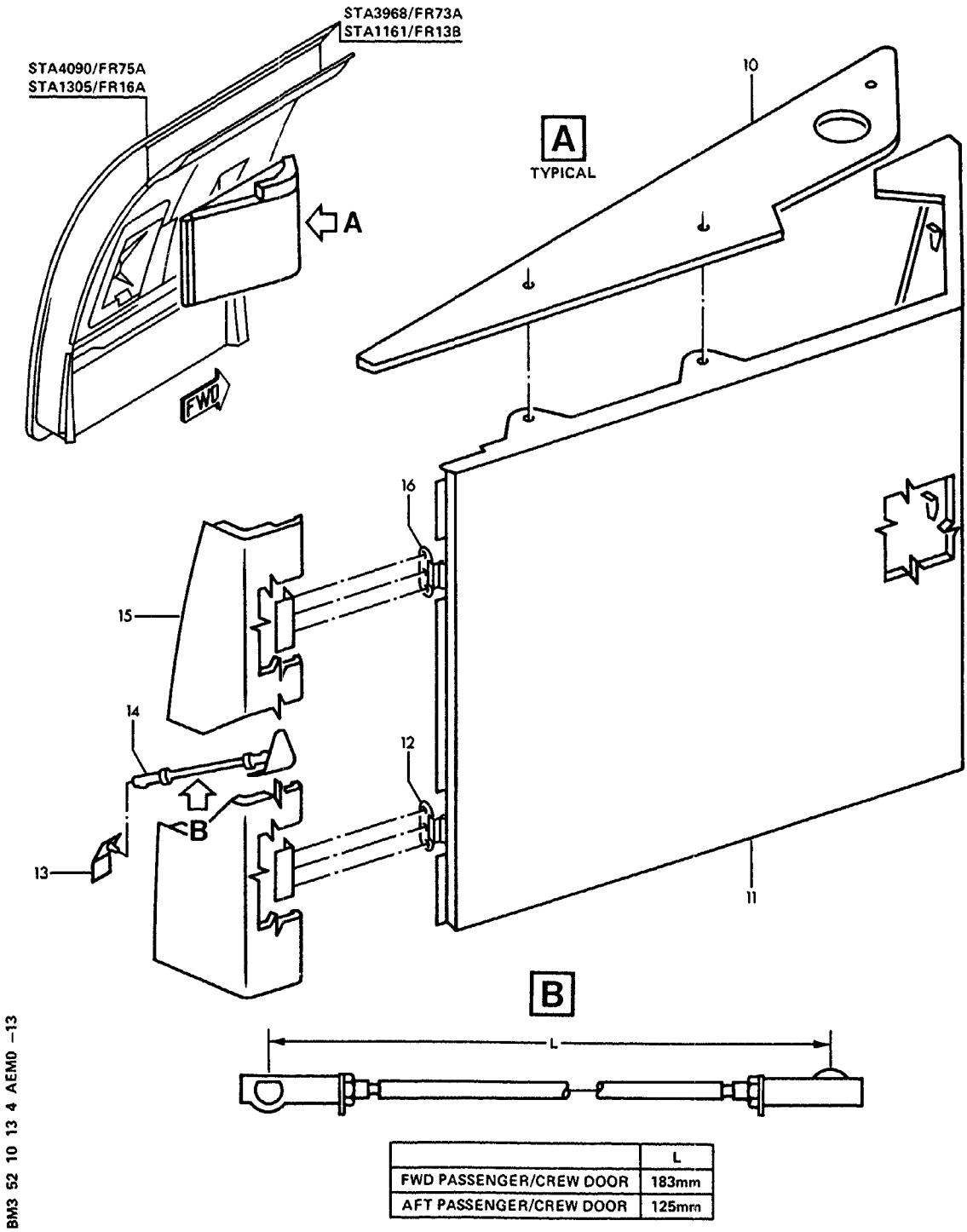
(1)Remove assist handle from window lining (7) as follows:
(a)Press snap parts of top section (20) in outwards direction.
(b)Remove top section (20) from bottom section (21).
(c)Remove screws (22) and washers (23).
(d)Remove bottom section (21) from window lining (7).
(2)Remove screws and guide arm lining (1).
(3)Remove screws and washers, unfasten quick-release fasteners and remove window lining (7).
(4)Remove upper lining (2) as follows:
(a)Remove buzzer (Ref. 52-73-12, P. Block 401).
(b)Remove screws and washers or unfasten quick-release fasteners and remove upper lining (2).
(5)Remove cover with recessed panel (3) as follows:
(a)Remove test switch (Ref. 52-73-14, P. Block 401).
(b)Remove warning light (Ref. 52-73-11, P. Block 401).
CAUTION : DO NOT MOVE EMERGENCY CONTROL HANDLE DURING FOLLOWING STEPS.
(c)Remove safety pin for emergency control handle.
(d)Remove screws or unfasten quick-release fasteners and remove cover with recessed panel (3).
(e)Insert safety pin for emergency control handle.
(6)Remove screws and washers or unfasten quick-release fasteners and remove center linings (4),(5).
(7)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. 25-61-22,



FWD Door Lining
Figure 401

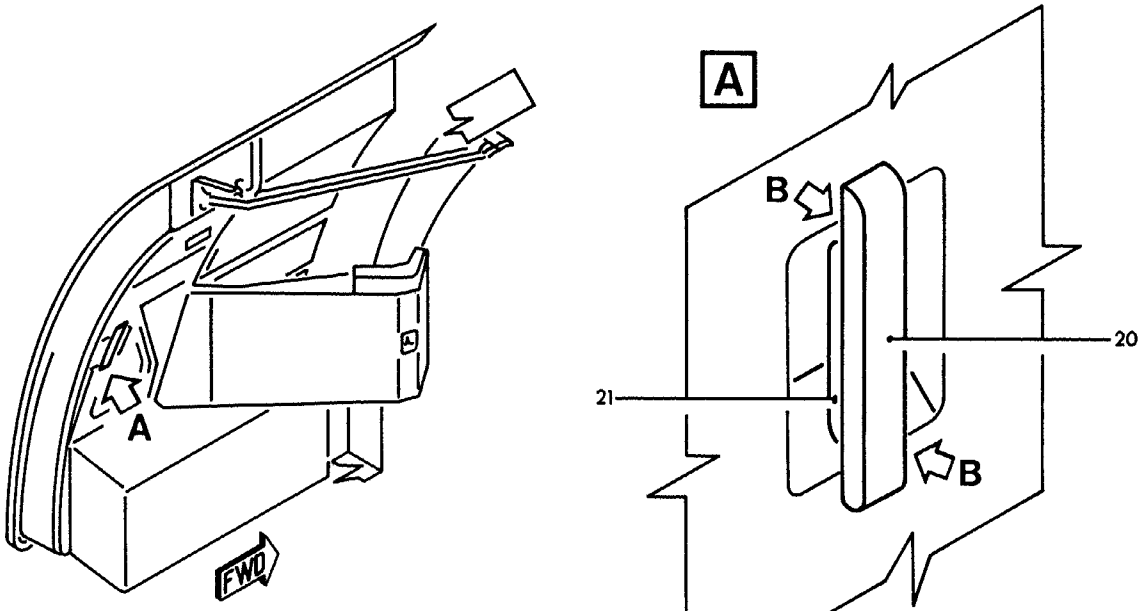


AFT Door Lining
Figure 402

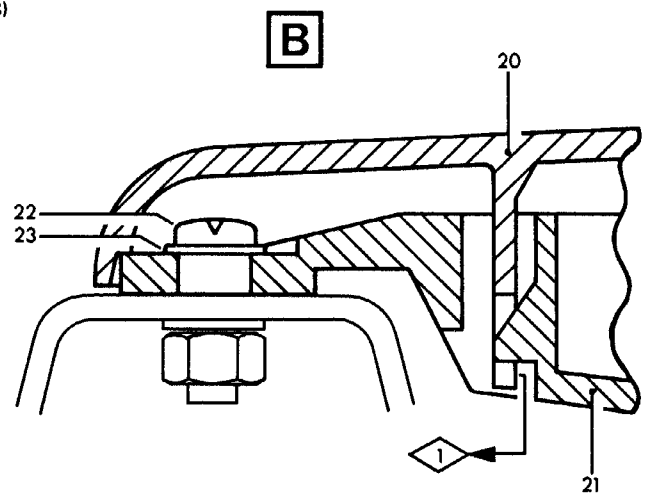


	L
FWD PASSENGER/CREW DOOR	183mm
AFT PASSENGER/CREW DOOR	125mm

Support Arm Lining (TYPICAL)
Figure 403



1 TO REMOVE TOP SECTION (20) FROM BOTTOM SECTION (21) PRESS SNAP PARTS OF TOP SECTION (20) IN DIRECTION OF ARROW (OUTWARDS)



BM3 52 10 13 4 AGMO 17

Assist Handle - Attachment
Figure 404

P. Block 401).
(8)Remove screws and washers, unfasten quick-release fasteners and remove lining frame (6).
(9)Remove support arm lining as follows:
(a)Remove upper support arm lining (10) by removing screws and washers.
(b)Extract turnbuckle (14) from fitting (13) at door.
(c)Remove front support arm lining (11) with lining flap (15) by removing screws and washers.
(d)Remove lining flap (15) by removing screws, washers and nuts from hinges (12),(16).
(10)Remove insulation mats by disconnecting velcro fasteners.
NOTE : Insulation mat on FWD passenger/crew door consists of 2 parts.
Insulation mat on AFT passenger/crew door consists of 1 part.

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

(1)Remove assist handle from window lining (7) as follows:
(a)Press snap parts of top section (20) in outwards direction.
(b)Remove top section (20) from bottom section (21).
(c)Remove screws (22) and washers (23).
(d)Remove bottom section (21) from window lining (7).
(2)Remove screws and guide arm lining (1).
(3)Remove screws and washers, unfasten quick-release fasteners and remove window lining (7).
(4)Remove residual pressure warning light (Ref. 52-73-15, P. Block 401).
(5)Remove upper lining (2) as follows:
(a)Remove buzzer (Ref. 52-73-12, P. Block 401).
(b)Remove screws and washers or unfasten quick-release fasteners and remove upper lining (2).
(6)Remove cover with recessed panel (3) as follows:
(a)Remove test switch (Ref. 52-73-14, P. Block 401).
(b)Remove warning light (Ref. 52-73-11, P. Block 401).
CAUTION : DO NOT MOVE EMERGENCY CONTROL HANDLE DURING FOLLOWING STEPS.
(c)Remove safety pin for emergency control handle.
(d)Remove screws or unfasten quick-release fasteners and remove cover with recessed panel (3).
(e)Insert safety pin for emergency control handle.
(7)Remove screws and washers or unfasten quick-release fasteners and remove center linings (4),(5).
(8)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401).
(9)Remove screws and washers, unfasten quick-release fasteners and remove lining frame (6).
(10)Remove support arm lining as follows:
(a)Remove upper support arm lining (10) by removing screws and washers.
(b)Extract turnbuckle (14) from fitting (13) at door.

(c)Remove front support arm lining (11) with lining flap (15) by removing screws and washers.
(d)Remove lining flap (15) by removing screws, washers and nuts from hinges (12),(16).
(11)Remove insulation mats by disconnecting velcro fasteners.
NOTE : Insulation mat on FWD passenger/crew door consists of 2 parts.
Insulation mat on AFT passenger/crew door consists of 1 part.

**ON A/C ALL

C. Preparation for Installation
(1)Make certain that placards on replaced or repaired components are in correct positions and in good condition.
(2)If necessary, install new placards (Ref. 11-00-00, P. Block 1).

D. Installation (Ref. Fig. 401, 402, 403)
(Ref. Fig. 404)

**ON A/C 001-003,

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(3)Press insulation mats on velcro tape on door structure.
(4)Position lining frame (6) and install screws and washers and fasten quick-release fasteners.
(5)Install cover with recessed panel (3) as follows:
CAUTION : DO NOT MOVE EMERGENCY CONTROL HANDLE DURING FOLLOWING STEPS.
(a)Remove safety pin for emergency control handle.
(b)Position cover with recessed panel (3) and fasten quick-release fasteners.
(c)Insert safety pin for emergency control handle.
(d)Install warning light (Ref. 52-73-11, P. Block 401).
(e)Install test switch (Ref. 52-73-14, P. Block 401).
(6)Position upper lining (2) and install screws and washers and fasten quick-release fasteners.
(a)Install buzzer (Ref. 52-73-12, P. Block 401).
(7)Position center linings (4),(5) and install screws and washers and fasten quick-release fasteners.
(8)Install window lining (7).
(9)Position guide arm lining (1) and install screws.
(10)Install support arm lining as follows:
(a)Install lining flap (15) to front support arm lining (11) by installing screws, washers and nuts to hinges (12),(16). Tighten nuts.
(b)Position front support arm lining (11) with lining flap (15) and

install screws and washers.
(c)Check length of turnbuckle (14), adjust as necessary and secure with tab washers.
NOTE : FWD passenger/crew door, length 183 mm
AFT passenger/crew door, length 125 mm
(d)Install turnbuckle (14) to fitting (13).
(e)Position upper support arm lining (10) and install screws and washers.
(11)Install assist handle to window lining (7) as follows:
(a)Position bottom section (21) on window lining (7).
(b)Install washers (23) and screws (22).
(c)Position top section (20) on bottom section (21) and press fully in to locate snap parts of top section (20).
NOTE : Snap parts of top section (20) locate on attachment lugs of bottom section (21).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(3)Press insulation mats on velcro tape on door structure.
(4)Position lining frame (6) and install screws and washers and fasten quick-release fasteners.
(5)Install cover with recessed panel (3) as follows:
CAUTION : DO NOT MOVE EMERGENCY CONTROL HANDLE DURING FOLLOWING STEPS.
(a)Remove safety pin for emergency control handle.
(b)Position cover with recessed panel (3) and fasten quick-release fasteners.
(c)Insert safety pin for emergency control handle.
(d)Install warning light (Ref. 52-73-11, P. Block 401).
(e)Install test switch (Ref. 52-73-14, P. Block 401).
(6)Position upper lining (2) and install screws and washers and fasten quick-release fasteners.
(a)Install buzzer (Ref. 52-73-12, P. Block 401).
(7)Position center linings (4),(5) and install screws and washers and fasten quick-release fasteners.
(8)Install residual pressure warning light (Ref. 52-73-15, P. Block 401).
(9)Install window lining (7).
(10)Position guide arm lining (1) and install screws.
(11)Install support arm lining as follows:
(a)Install lining flap (15) to front support arm lining (11) by installing screws, washers and nuts to hinges (12),(16). Tighten nuts.
(b)Position front support arm lining (11) with lining flap (15) and install screws and washers.
(c)Check length of turnbuckle (14), adjust as necessary and secure with tab washers.

NOTE : FWD passenger/crew door, length 183 mm
AFT passenger/crew door, length 125 mm

(d)Install turnbuckle (14) to fitting (13).
(e)Position upper support arm lining (10) and install screws and washers.
(12)Install assist handle to window lining (7) as follows:
(a)Position bottom section (21) on window lining (7).
(b)Install washers (23) and screws (22).
(c)Position top section (20) on bottom section (21) and press fully in to locate snap parts of top section (20).
NOTE : Snap parts of top section (20) locate on attachment lugs of bottom section (21).

**ON A/C ALL

E. Test
(1)Close door and observe the following:
(a)No chafing of door lining.
(b)Correct attachment of all door lining parts.

F. Close-Up
(1)Install either container with dual escape slide (Ref. 25-61-21, (P. Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401).
(2)Open door.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(3)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(4)Close door.
(5)Remove access platform.

** ON ALL DOORS

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door lining and insulation are identical in design and function but are opposite hand. The LH door lining and insulation only is described and illustrated.

1. Reason for the Job

A. To monitor the condition of lining and insulation.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B.	Inspection Mirror
C.	Torch

Referenced Procedures

- 11-00-00, P. Block 1	Placards and Markings - General
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions

3. Procedure

A. Job Set-Up
(1)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open door.

B. Check
(1)Check door lining and insulation for
(a)Cracks and deformations
(b)Cracking and flaking of paint
(c)Tight fit
(d)No chafing during door closing and opening.
R (e)Make certain that placards are in correct positions and in good
R condition.
R (f)If necessary, install new placards (Ref. 11-00-00, P. Block 1).

C. Close-Up

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(1)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(2)Close door.
(3)Remove access platform.

FWD, AFT DOOR DAMPER AND EMERGENCY OPERATION CYLINDER - SERVICING

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS. (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door damper and emergency operating cylinder are identical in design and function.

1. Reason for the Job
Replacement of diaphragm in percussion mechanism after emergency operation.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B. 701-2978000	Pin Safety - Passenger Door Damper and Emergency Operation Cylinder
C.	Torque Wrench, 1.0 m.daN (88.49 lbf.in)
D.	Seals for Percussion Mechanism
E.	Diaphragm
F.	Pin for Percussion Mechanism
G.	Lockwire, Corrosion-Resistant Steel, Dia. 0,63 mm (0.025 in.)
H. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

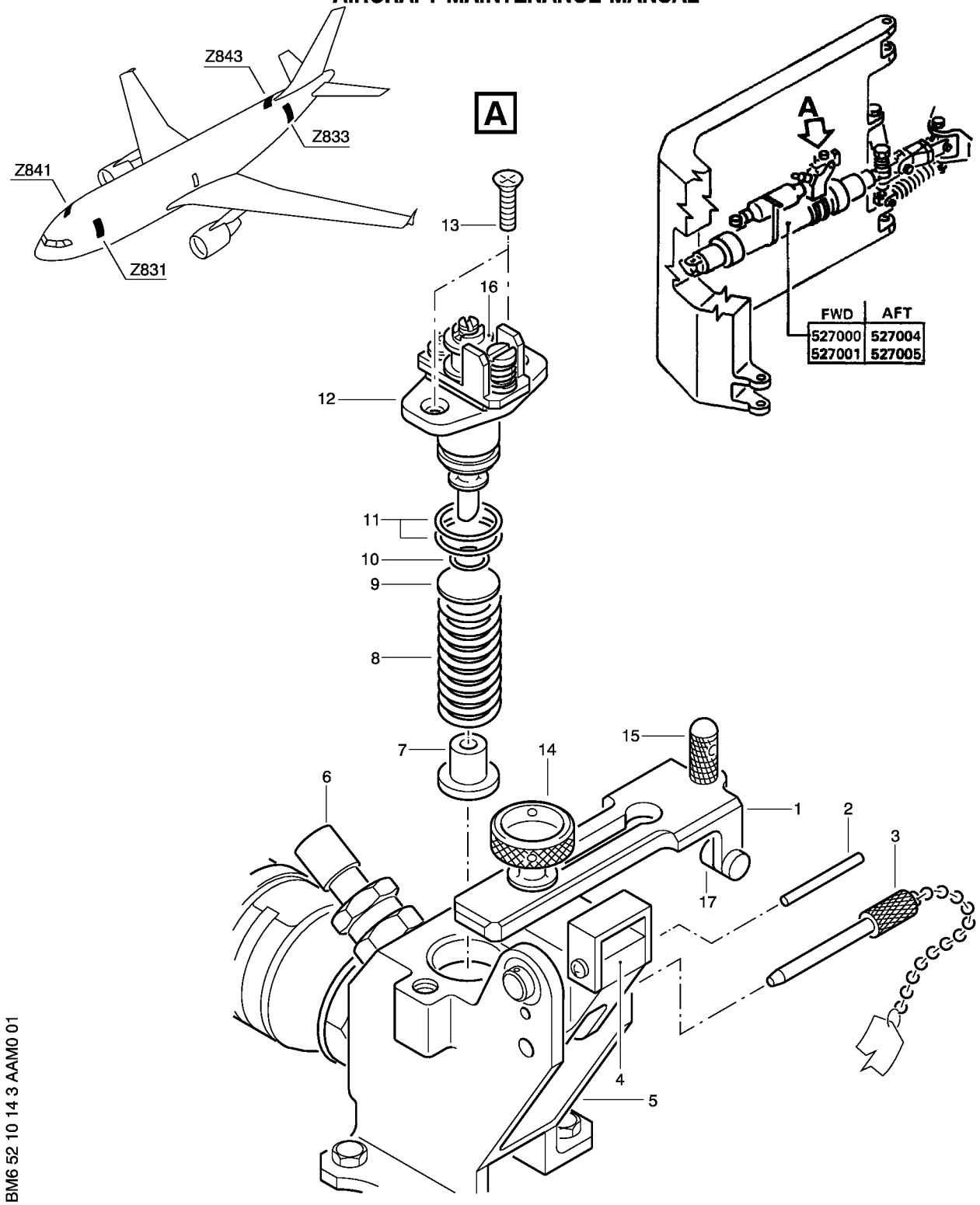
- 11-32-52, P. Block 1	Doors - Interior Placards and Markings
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation

3. Procedure
(Ref. Fig. 301)

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Remove upper support arm lining (Ref. 52-10-13, P. Block 401).
(4)Check bottle gage to ensure that no pressure exists in cylinder. Vent pressure through fill valve.

R B. Removal of the Diaphragm

R WARNING : WEAR GOGGLES WHEN YOU REMOVE OR INSTALL THE LOCKWIRE. CUT, REMOVE
R AND DISCARD THE LOCKWIRE AS YOU DO THE TASK. LOOSE LOCKWIRE CAN
R CUT OR BLIND YOU.



Percussion Mechanism
Figure 301

R (1)Make sure that the safety pin (3) (PN 701-2978200) is installed in
R the percussion housing (5).
R (2)Cut and remove lockwire from knurled screw (14) and release lever
R pin (15).
R (3)Loosen the knurled screw (14) until you can move the release lever (1).
R (4)Retract the release lever (1) until it does not engage with the guide
R (4).
R (5)Turn the release lever (1) 90 degrees to get access to the valve
R guide (12).
R (6)Tighten the knurled screw (14) to attach the release lever (1) in
R its stowed position.
R (7)Remove and discard the shear pin (2) from the percussion housing (5).
R (8)Remove the screws (13) from the valve guide (12)
R (9)Remove the valve guide (12) from the percussion housing (5).
R (10)Remove the diaphragm (9), the spring (8) and the spacer (7) from the
R percussion housing (5).
R (11)Remove and discard the packings (11) and the seal (10) from the valve
R guide (12).
R (12)Make sure that all pieces of unwanted material are removed from the
R hole of the percussion housing (5).

C. Preparation for Installation

(1)Clean removed parts using brush, clean lint-free cloth and cleaning agent (Mat.No. 11-008).
(2)Dry components using clean dry air.
R (3)Make sure that striker of percussion mechanism (16) is free
R from damage and that it moves smoothly in the valve guide (12).

D. Installation of the Diaphragm

WARNING : MAKE SURE THAT YOU INSTALL THE CORRECT (ALUMINUM) SHEAR PIN ON THE DOOR DAMPER PERCUSSION DEVICE. INSTALLATION OF AN INCORRECT SHEAR PIN WILL PREVENT OPERATION OF THE ACTUATOR IN EMERGENCY MODE.

(1)Do a visual inspection of the component interface and/or the adjacent area.
(2)Clean the component interface and/or adjacent area.
(3)Make sure that the parts retained from the removed component are
R clean and in the correct condition.

R (4)Install the spacer (7), the spring (8) and the new diaphragm (9)
R in the percussion housing (5).
R (5)Install the two new packings (10) on the valve guide (12).
R (6)Install the new seal (10) on the valve guide (12).
R (7)Put the valve guide (12) in position on the percussion housing (5).

R CAUTION : DO NOT APPLY MORE THAN THE SPECIFIED TORQUE TO THE SCREWS
R OF THE GUIDE. OVERTORQUE WILL CAUSE DAMAGE TO THE DIAPHRAGM
R AND WILL THUS CAUSE LEAKAGE OF NITROGEN FROM THE CYLINDER.

R (8)Install the screws (13) as follows:
R (a)Put the screws (13) in position on the valve guide (12) and torque them to between 0.4 and 0.5 m.daN (35.39 and 44.24 lbf.in).

R NOTE : When the screws (13) are tight, there is a clearance of between
R 0.30 mm (0.0118 in.) and 0.40 mm (0.0157 in.) between the valve
R guide (12) and the percussion housing (5).

R **WARNING : MAKE SURE THAT YOU INSTALL THE CORRECT (ALUMINIUM) SHEAR PIN ON**
R **THE DOOR DAMPER PERCUSSION DEVICE.**
R **INSTALLATION OF AN INCORRECT SHEAR PIN WILL PREVENT OPERATION OF**
R **THE ACTUATOR IN THE EMERGENCY MODE.**

R (9)Install the shear pin (2) as follows:
R (a)Put the new shear pin (2) into the percussion housing (5).
R (10)Loosen the knurled screw (14) and turn the release lever (1) 90 degrees to its straight position.

R **CAUTION : MAKE SURE THAT THE RELEASE LEVER IS FULLY EXTENDED AND THE**
R **KNURLED NUT TOUCHES THE END OF THE LEVER SLOT. A DIFFERENT**
R **POSITION WILL PREVENT THE CORRECT OPERATION OF THE DOOR DAMPER**
R **AND EMERGENCY OPERATION CYLINDER IN THE EMERGENCY MODE.**

R (11)Extend the release lever (1) to its armed position as follows:
R (a)Make sure that the release lever (1) aligns with the flanged nut of the valve guide (12).
R (b)Move the release lever (1) against the spring load of the valve guide (12) until it can engage into the guide (4).
R (c)Move the release lever (1) to its fully extended position and hold it.
R (d)Make sure that the recess of the knurled screw (14) can fully engage in the rear bore of the release lever (1).
R (e)Tighten the knurled screw (14) and safety it with lockwire, Material No. 19010 (MISCELLANEOUS (Material No. 19-010)) on the lever pin (15).

R **CAUTION : WHEN REFILLING A BOTTLE DO NOT EXCEED THE MAXIMUM PRESSURE**
R **INDICATED ON THE PLACARD.**

R (12)Charge the nitrogen bottle via charging valve (6) with dry air or nitrogen to the pressure indicated on the placard (Ref. 11-32-52, P. Block 1).
R (13)Remove the safety pin (3) (PN 701-2978200) from the percussion housing (5).

E. Test
(1)Open and close door and check for dry air or nitrogen leaks.

F. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install upper support arm lining. (Ref. 52-10-13, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(3)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(4)Close door.
(5)Remove access platform.

FWD, AFT DOOR DAMPER AND EMERGENCY OPERATION CYLINDER - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B.	Torque Wrench, 0.3 to 1.1 m.daN (26.5 to 97 lbf.in.)
C.	Nut 1/4"-28 UNJF for Removal/Installation of Preloading Spring Unit
D.	Cotter Pins
E. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 11-32-52, P. Block 1	Doors - Interior Placards and Markings
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-14, P. Block 501	FWD, AFT Door Damper and Emergency Operation Cylinder
R - 52-10-14, P. Block 601	FWD, AFT Door Damper and Emergency
R	Operation Cylinder

2. Procedure

A. Job Set-Up

(1)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(2)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).

(3)Remove upper support arm lining (Ref. 52-10-13, P. Block 401).

B. Removal
(Ref. Fig. 401)
(1)Door Damper and Emergency Operation Cylinder
(a)Install nut (23) on preloading spring unit (22) to hold the spring.
(b)Remove cotter pin (12), nut (13) and washer (14).
(c)Remove cotter pin (21), nut (20) and washer (19) from eye bolt (17) and separate washer (18).
(d)Remove preloading spring unit (22) with bolt (24) and washer (25) from telescopic unit (16) and eye bolt (17).
(e)Remove bush (15) from bellcrank (10).
(f)Remove cotter pin (1), nut (2) and washer (3).
(g)Secure cylinder (26) against dropping down and remove bolt (8) and washer (7).
(h)Remove cylinder (26).
(j)If trunnion (5) is held in position by retaining rings (6) and (27), located in annular grooves, remove the retaining parts.
(k)Press out bush (4).
(l)Press out trunnion (5) and remove bearing block (28).

C. Preparation of Replacement Component

WARNING : MAKE CERTAIN THAT SAFETY PIN IS INSERTED.

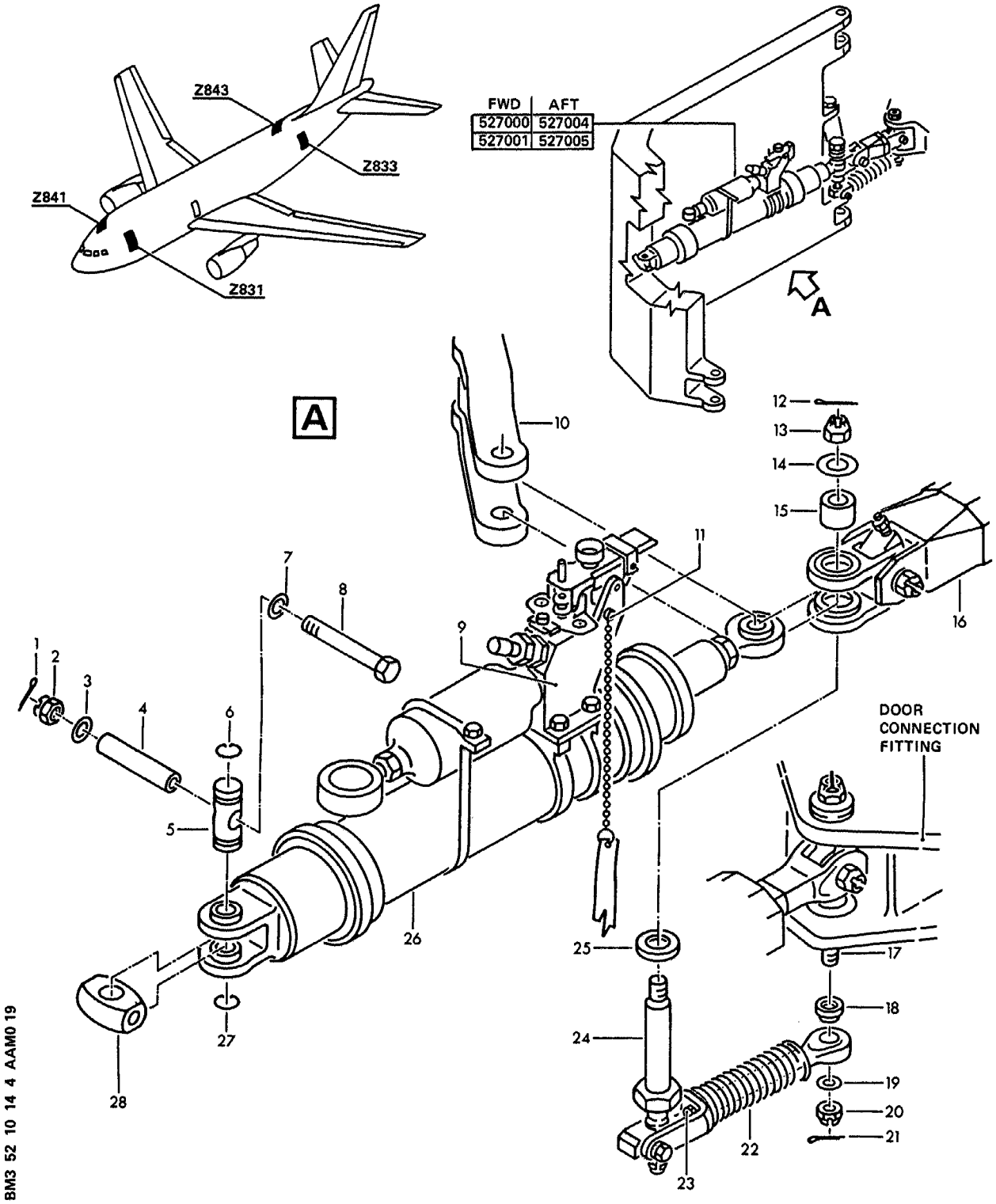
CAUTION : WHEN REFILLING A BOTTLE DO NOT EXCEED THE MAXIMUM PRESSURE INDICATED ON THE PLACARD.

(1)Check that pressure gage at nitrogen bottle indicates pressure shown on placard (Ref. 11-32-52, P. Block 1).

NOTE : Placard is situated on top of support arm or on door frame lining forward of support arm.

(2)Prepare replacement door damper and emergency operation cylinder (26) as follows:
(a)Insert bush (15) into bellcrank (10).
(b)Position bellcrank (10) into eye-end of telescopic unit (16) and connect them temporarily with threaded pin (24), washers (25) and (14) and nut (13).
(c)Adjust kinematic and length of door damper and emergency operation
R cylinder (26) (Ref. 52-10-14, P. Block 501).

D. Installation (Ref. Fig. 401)
(1)Door Damper and Emergency Operation Cylinder
(a)Position bearing block (28) and install trunnion (5).
(b)If trunnion (5) contains annular grooves, assemble retaining rings (6) and (27) into annular grooves.
(c)Install bush (4).
(d)Insert cylinder (26) with eye fitting into telescopic unit (16).
(e)Install bush (15) in bellcrank (10).
(f)Position bellcrank (10) to telescopic unit (16) and eye fitting of cylinder (26) and connect with bolt (24) and washer (25) together



FWD and AFT Door Damper and Emergency
Operation Cylinder
Figure 401

with preloading spring unit (22).
(g)Install washer (14) and nut (13).
(h)TORQUE nut (13) to max. 1.1 m.daN (97 lbf.in.) and back off nut (13) to next cotter pin hole.
(i)Secure nut (13) with cotter pin (12).
(j)Install preloading spring unit (22) on eye bolt (17) installed in door connection fitting with washers (18),(19) and nut (20).
(k)TORQUE nut (20) to max. 0.35 m.daN (31 lbf.in.) and back off nut (20) to next cotter pin hole.
(l)Secure nut (20) with cotter pin (21).
(m)Install bolt (8) with washers (7),(3) and nut (2).

(n)TORQUE nut (2) to max. 0.35 m.daN (31 lbf.in.) and back off nut (2) to next cotter pin hole.
(o)Secure nut (2) with cotter pin (1).
(p)Remove nut (23) from preloading spring unit (22).
(q)Check door damper and emergency operation cylinder (Ref. 52-10-14, P. Block 601).

E. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(3)Install upper support arm lining (Ref. 52-10-13, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(4)Arm emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(5)Close door.
(6)Remove access platform.

FWD, AFT DOOR DAMPER AND EMERGENCY OPERATION CYLINDER - ADJUSTMENT/TEST

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 4.60 to 5.20 m (15 to 17 ft.)
	B.	Torque Wrench, 0 to 0.6 m.daN (0 to 53 lbf.in.)
R	C.	Feeler Gage
	D. Material No. 05-027	Special Materials (Ref. 20-31-00)
R	E. Material No. 16-006	Structure Paints (Ref. 20-31-00)
R	F. Material No. 16-008	Structure Paints (Ref. 20-31-00)
	Referenced Procedures	
	- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
	- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
R	- 52-10-14, P. Block 401	Door Damper and Emergency Operation Cylinder

2. Procedure

A. Job Set-Up

R (1)Position access platform below applicable passenger/crew door
R (referred to as door).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

R (2)Disarm emergency escape slide mechanism of applicable door and
R deactivate door damper and emergency operation cylinder (referred to as
R door damper) (Ref. 52-10-00, P. Block 301).
(3)Remove appropriate door lining (Ref. 52-10-13, P. Block 401).

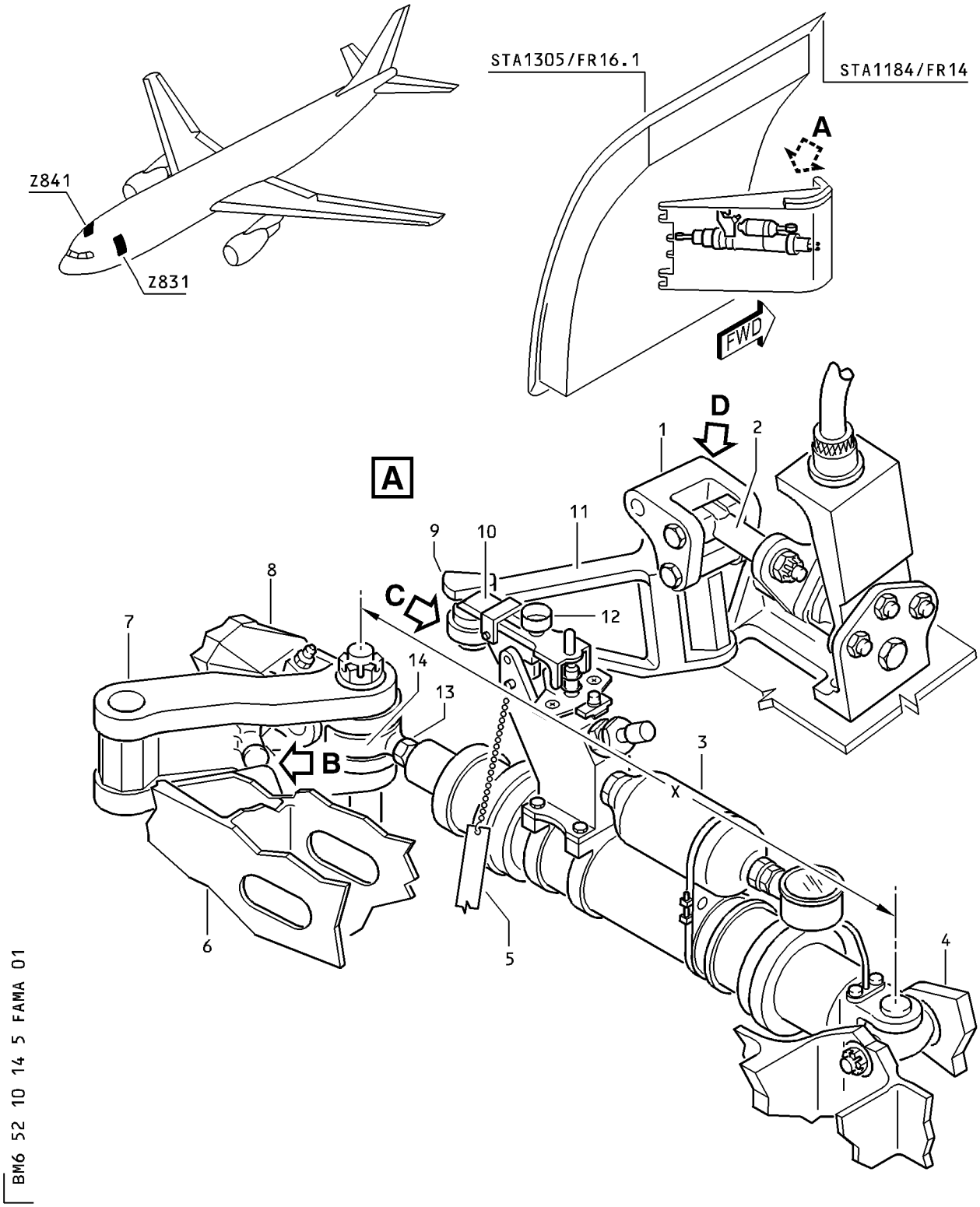
B. Adjustment

R
R (Ref. Fig. 501) (Sheets 1-2)
R (Ref. Fig. 502)
R ** ON FWD PASSENGER/CREW DOOR

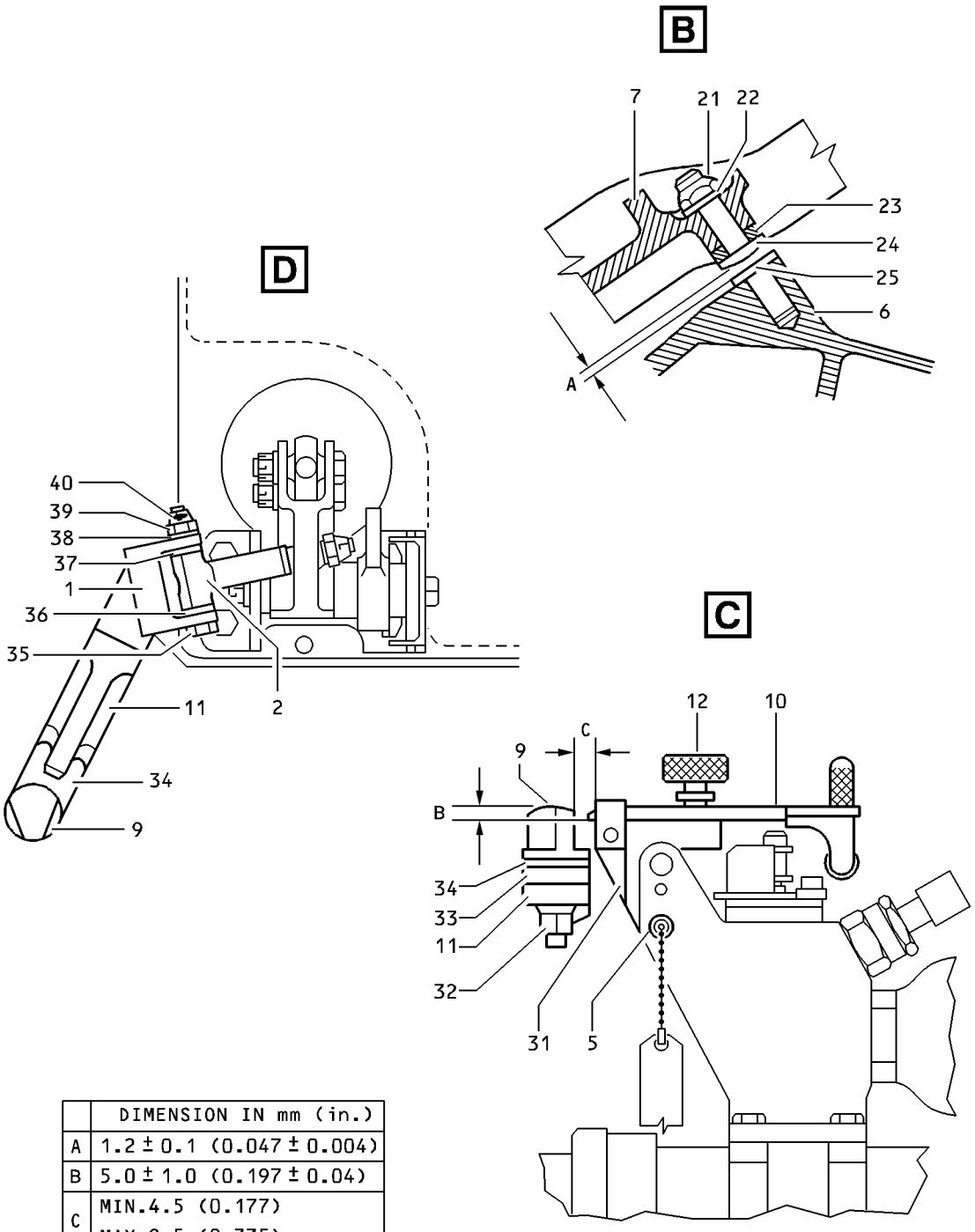
R (1)Adjustment of Door Damper Kinematic

R NOTE : Make sure that door damper is not attached on the telescopic
R unit (Ref. 52-10-14, P. Block 401).

R (a)Move opened door inboard so that its door seal touches front



Emergency Release Mechanism and
Door Damper Kinematics of FWD Door - Sheet 1
Figure 501

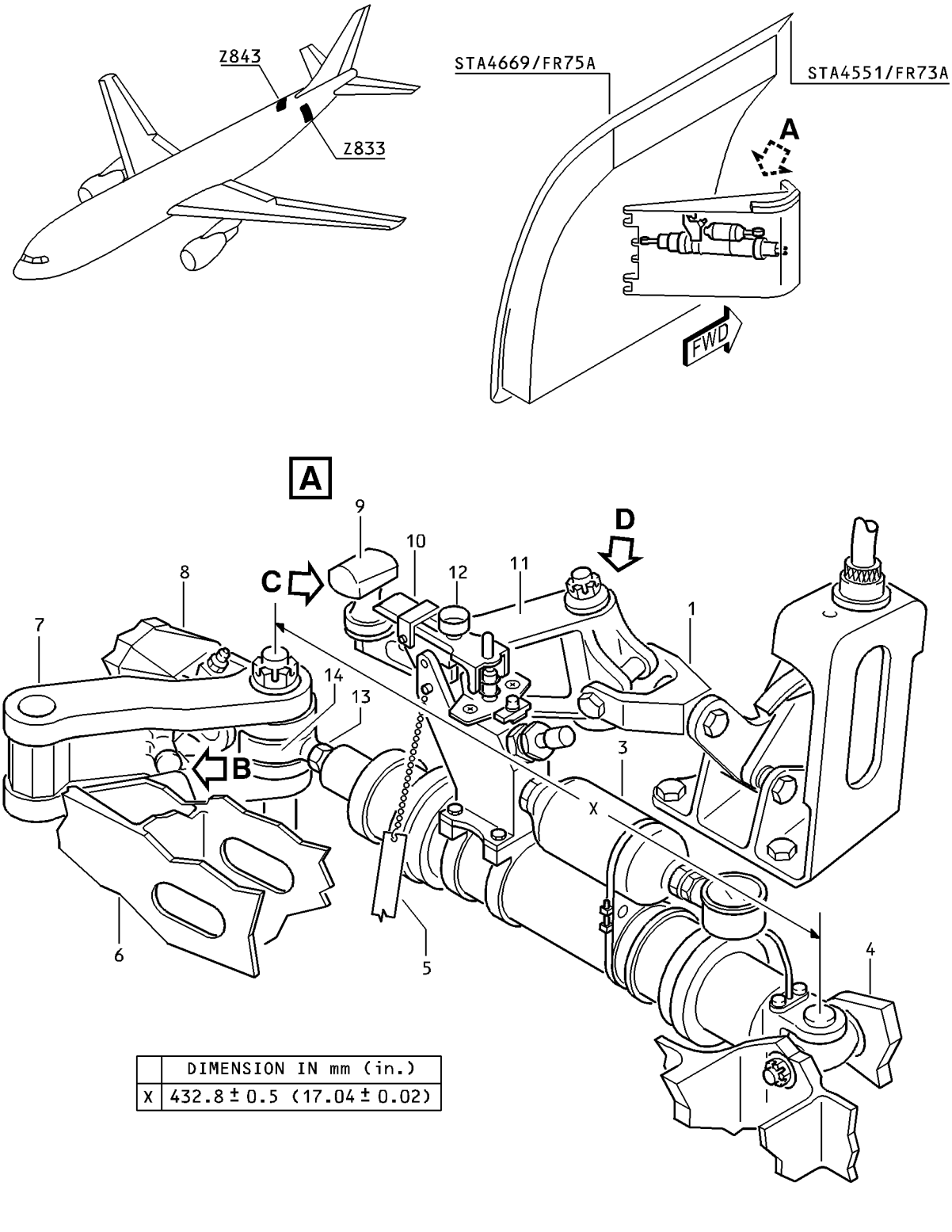


	DIMENSION IN mm (in.)
A	1.2 ± 0.1 (0.047 ± 0.004)
B	5.0 ± 1.0 (0.197 ± 0.04)
C	MIN.4.5 (0.177) MAX.8.5 (0.335)

BM6 52 10 14 5 FAMM 02

Emergency Release Mechanism and
Door Damper Kinematics of FWD Door - Sheet 2
Figure 501

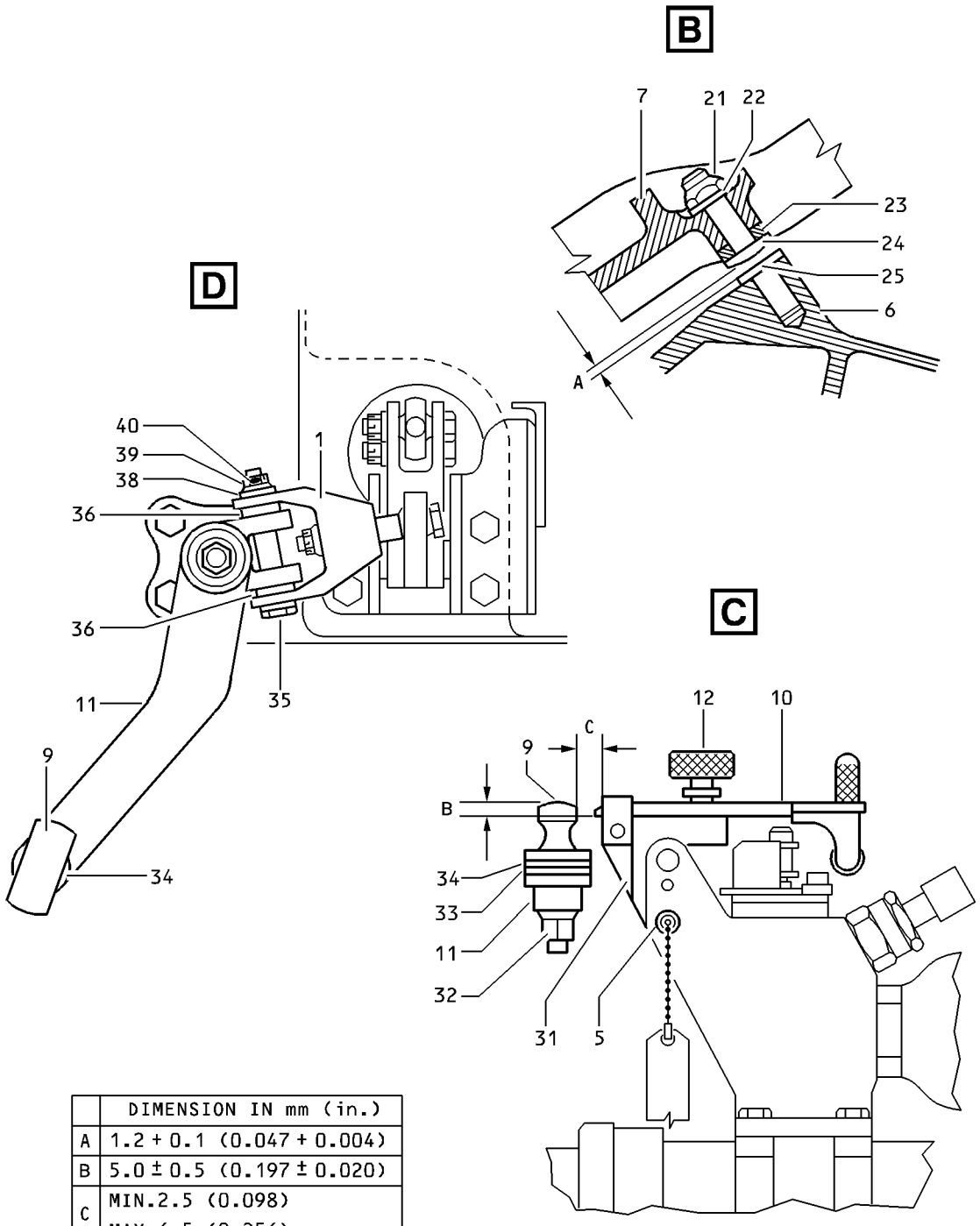
R



	DIMENSION IN mm (in.)
X	432.8 ± 0.5 (17.04 ± 0.02)

Emergency Release Mechanism and
Door Damper Kinematics of AFT Door - Sheet 1
Figure 502

R



	DIMENSION IN mm (in.)
A	1.2 + 0.1 (0.047 + 0.004)
B	5.0 ± 0.5 (0.197 ± 0.020)
C	MIN.2.5 (0.098) MAX.6.5 (0.256)

BM6 52 10 14 5 AAMM 01

Emergency Release Mechanism and
Door Damper Kinematics of AFT Door - Sheet 2
Figure 502

R

R and rear door frame of fuselage.
R (b)Press telescopic unit (8) together to its minimum length and
R hold it.
R (c)Measure the gap "A" between stop bolt (24) of fork-end (7) and
R stop (25) of support arm (6) with a feeler gage.

R NOTE : The gap must be 1.2 ± 0.1 mm (0.047 ± 0.004).

R (d)If necessary, adjust gap "A" as follows:
R 1 Fully open door.
R 2 Remove nut (21), washer (22), adjustment washers (23) and stop
R bolt (24) from bellcrank (7).
R 3 Add or remove quantity of adjustment washers (23) so that gap "A"
R is correctly adjusted.

R NOTE : If more adjustment washers (23) are used, then they should have
R the same thickness as measured distance "A". If required,
R rework washers as necessary.

R 4 Install stop bolt (24) together with adjustment washers (23),
R washer (22) and nut (21) on bellcrank (7).
R 5 TORQUE nut (21) to between 0.3 and 0.35 m.daN (26.5 and
R 31.0 lbf.in.).
R (e)Install door damper (3) correctly (Ref.52-10-14, P.Block 401).

R (2)Adjustment of Door Damper Length

R NOTE : Make sure that door damper is not attached on the telescopic
R unit (Ref. 52-10-14, P. Block 401).

R (a)Push bellcrank (7) so that stop bolt (24) contacts stop (25).
R (b)Measure distance "X" between centers of bellcrank (7) and damper
R fitting of support arm (4).
R (c)Push door damper (3) into its fully compressed position.
R (d)Measure distance between both eye-ends of door damper (3).

R NOTE : This distance must be equal to distance "X" measured at
R step (b).

R (e)Adjust length of door damper (3) as follows:
R 1 Remove lockwire and loosen jam nut (13).
R 2 Turn threaded eye-end (14) as required until damper length is
R correctly adjusted.
R 3 Screw in threaded eye-end (14) by 3.5 turns to reduce the length
R for clearance at the internal damper stop.
R 4 TORQUE jam nut (13) to 2.5 m.daN (18.43 lbf.in.) and safety with
R lockwire, corrosion-resistant steel, dia 0.8 mm (0.03 in.).
R (f)Install door damper (3) correctly (Ref.52-10-14, P.Block 401).

R (3)Adjustment of Emergency Release Mechanism
R (a)Make sure that door damper (3) is correctly installed

(Ref. 52-10-14, P. Block 401).

(b)Make sure that girt bar fittings are correctly adjusted (Ref. 52-10-11, P. Block 501).

(c)Make sure that applicable door is closed and in following condition:
- the emergency control handle is moved to its fully forward (armed) position,
- the release lever (10) of door damper (3) is fully retracted in its safetied position.
- the percussion mechanism of door damper (3) is blocked with related stowage pin (5).

(d)Measure distance "B" between lower edge of release lever (10) and top of door stop (9) as follows:

1 Operate interior control handle to lift door but do not open it at this stage.
2 Loosen knurled screw (11) and carefully extend release lever (10) until it contacts door stop (9).
3 Mark position of lower edge of release lever (10) on door stop (9) with a sharp pencil.
4 Retract release lever (10) and secure it with knurled screw (11).
5 Measure distance "B" between pencil mark and top of door stop (9).

NOTE : The dimension must be 5.0 ± 1.0 mm (0.2 ± 0.04 in.).

(e)If the distance "B" is out of tolerance, select quantity of adjustment washers (33) as follows:

1 Remove nut (32) from door stop (9).
2 Remove door stop (9), locating washer (34) and adjustment washers (33) from stop arm (11).
3 Add or remove quantity of adjustment washers (33) until distance "B" is correct.

NOTE : If more washers (33) are used, then they should have the same thickness as measured distance "B". If required, rework washers as necessary.

4 Assemble adjustment washers (33), locating washer (34) and door stop (9) on stop arm (11).

NOTE : Make sure that locating washer (34) engages with stop arm (11).

5 Install nut (32) on door stop (9) and TORQUE it to between 0.5 and 0.6 m.daN (44.2 and 53.1 lbf.in.).

(f)Measure gap "C" between door stop (9) and operating lever (31).

R NOTE : The gap "C" must be between 4.5 and 8.5 mm
R (0.177 and 0.335 in.).

(g)If necessary, adjust position of stop arm (11) as follows:

1 Remove and discard cotter pin (40) from nut (39).
2 Support stop arm (11) and remove nut (39), washer (38), bolt (35)

R and adjustment washers (36) and (37).
R 3 Change the quantity of adjustment washers (36) and (37) so that
R gap "C" is correctly adjusted.

R NOTE : If more adjustment washers (36) or (37) are used, then they
R should have the same thickness as measured distance "C".
R If required, rework washers as necessary.

R 4 Assemble adjustment washers (36) and (37) between link (2) and
R fork fitting (1) and install bolt (35), washer (39) and nut (39).
R 5 Tighten nut (39) and safety it with new cotter pin (40).
R (h)Move emergency control handle to its fully aft (disarmed) position and
R safety it with related safety pin.
R (j)Open applicable door.
R **ON AFT PASSENGER/CREW DOORS

R (1)Adjustment of Door Damper Kinematic

R NOTE : Make sure that door damper is not attached on the telescopic
R unit (Ref. 52-10-14, P. Block 401).

R (a)Move opened door inboard so that its door seal touches front and
R rear door frame of fuselage.
R (b)Press telescopic unit (8) together to its minimum length and hold it.
R (c)Measure the gap "A" between stop bolt (23) of fork-end (7) and
R stop (25) of support arm (6) with a feeler gage.

R NOTE : The gap must be 1.2 ± 0.1 mm (0.047 ± 0.004 in.).

R (d)If necessary, adjust gap "A" as follows:
R 1 Fully open door.
R 2 Remove nut (21), washer (22), adjustment washers (23) and stop
R bolt (24) from bellcrank (7).
R 3 Add or remove quantity of adjustment washers (23) so that gap "A"
R is correctly adjusted.

R NOTE : If more adjustment washers (23) are used, then they should have
R the same thickness as measured distance "A". If required,
R rework washers as necessary.

R 4 Install stop bolt (24) together with adjustment washers (23),
R washer (22) and nut (21) on bellcrank (7).
R 5 TORQUE nut (21) to between 0.3 and 0.35 m.daN (26.5 and
R 31.0 lbf.in.).
R (e)Install door damper (3) correctly (Ref.52-10-14, P.Block 401).

R (2)Adjustment of Door Damper Length

R NOTE : Make sure that door damper is not attached on the telescopic
R unit (Ref. 52-10-14, P. Block 401).

R (a)Push bellcrank (7) so that stop bolt (24) contacts stop (25).
R (b)Push door damper (3) into its fully compressed position.
R (c)Adjust length of door damper (3) as follows:
R 1 Pull eye-end (14) so that piston rod extends for 4.5 mm (0.18 in.).
R 2 Remove lockwire and loosen jam nut (13).
R 3 Measure distance between both eye-ends of door damper (3).

R NOTE : This distance must be 432.8 ± 0.5 mm (17.04 ± 0.02 in.).

R 4 Turn threaded eye-end (14) as required until damper length
R is correctly adjusted.
R 5 TORQUE jam nut (13) to between 4.4 and 4.9 m.daN (32.45 and
R 36.14 lbf.ft.) and safety with lockwire, corrosion-resistant steel,
R dia. 0.8 mm (0.03 in.).

R (3)Adjustment of Emergency Release Mechanism
R (a)Make sure that door damper (3) is correctly installed
R (Ref. 52-10-14, P. Block 401).
R (b)Make sure that girt bar fittings are correctly adjusted
R (Ref. 52-10-11, P. Block 501).
R (c)Make sure that door is closed and in following condition:
R - the emergency control handle is moved to its fully forward (armed)
R position,
R - the release lever (10) of door damper (3) is fully retracted in
R its safetied position.
R - the percussion mechanism of door damper (3) is blocked with
R related stowage pin (5).
R (d)Measure distance "B" between lower edge of release lever (10) and
R top of door stop (9) as follows:
R 1 Operate interior control handle to lift pax. door but do not open
R it at this stage.
R 2 Loosen knurled screw (11) and carefully extend release lever (10)
R until it contacts door stop (9).
R 3 Mark position of lower edge of release lever (10) on door stop (9)
R with a sharp pencil.
R 4 Retract release lever (10) and secure it with knurled screw (11).
R 5 Measure distance "B" between pencil mark and top of door stop (9).

R NOTE : The dimension must be 5.0 ± 0.5 mm (0.2 ± 0.02 in.).

R (e)If the distance "B" is out of tolerance, select quantity of adjustment
R washers (33) as follows:
R 1 Remove nut (32) from door stop (9).
R 2 Remove door stop (9), retainer washer (34) and adjustment washers (33)
R from stop arm (11).
R 3 Add or remove quantity of adjustment washers (33) until distance "B"
R is correct.

R NOTE : If more adjustment washers (33) are used, then they should have
R the same thickness as measured distance "B". If required,
R rework washers as necessary.

4 Assemble adjustment washers (33), retainer washer (34) and door stop (9) on stop arm (11).
5 Install nut (32) on door stop (9) and TORQUE it to between 0.5 and 0.6 m.daN (44.2 and 53.1 lbf.in.).

(f)Measure gap "C" between door stop (9) and operating lever (31).

R NOTE : The gap "C" must be between 2.5 and 6.5 mm
R (0.098 and 6.5 in.).

(g)If necessary, adjust position of stop arm (11) as follows:
1 Remove and discard cotter pin (40) from nut (39).
2 Support stop arm (11) and remove nut (39), washer (38), bolt (35) and adjustment washers (36).
3 Change the quantity of adjustment washers (36) so that gap "C" is correctly adjusted.

NOTE : If more adjustment washers (36) are used, then they should have the same thickness as measured distance "C". If required, rework washers as necessary.

4 Assemble adjustment washers (36) between stop arm (11) and fork fitting (1) and install bolt (35), washer (38) and nut (39).
5 Tighten nut (39) and safety it with new cotter pin (40).

(h)Move emergency control handle to its fully aft (disarmed) position and safety it with related safety pin.
(j)Open applicable door.

** ON ALL PASSENGER/CREW DOORS

C. Test
Not applicable.

D. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(3)Install appropriate door lining (Ref. 52-10-13, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(4)Activate door damper and door warning system (Ref. 52-10-00, P. Block 301).
(5)Close applicable door.
(6)Remove access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : Should crack formation be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a crack is subsequently proved to exist, the component must be replaced.

NOTE : The LH and RH door mechanisms are identical in design and function, but are opposite hand. The LH door mechanism only is described and illustrated.

1. Reason for the Job

A. Inspection/check of :
(1)Door Damper and Emergency Operation Cylinder
R (2)Door Damper Kinematics
(3)Emergency Release Mechanism

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.20 to 4.40 m (15 to 17 ft.)
B.	Magnifying Glass 10 Fold
C.	Torch
D.	Inspection Mirror
E.	Lockwire, Corrosion-Resistant Steel, Dia 0.63 mm (0.025 in.)

Referenced Procedures

- 11-32-52, P. Block 1	Doors - Interior Placards and Markings
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-14, P. Block 501	FWD, AFT Door Damper and Emergency Operation Cylinder

3. Procedure

A. Job Set-Up
(1)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

R (2)Disarm emergency escape slide mechanism of applicable door and
R deactivate door damper and emergency operation cylinder (referred

R to as door damper) (Ref. 52-10-00, P. Block 301).
(3)Remove support arm lining (Ref. 52-10-13, P. Block 401).

B. Visually check door damper and emergency operation cylinder, door damper kinematics and emergency release mechanism for:
(1)Fluid leakage

NOTE : No leakage permissible.

(2)Corrosion (Ref. 51-74-10, P. Block 801)
(3)Damage, scratches, marks and dents (Ref. 51-73-10, P. Block 801)
(4)Peeling and flaking of paint (Ref. 51-75-10, P. Block 801)
(5)Security of attachment.
(6)Inspect striker for corrosion (Ref. SB 52-2018).

C. Measurement
(Ref. Fig. 601)
(Ref. Fig. 602)
CAUTION : WHEN REFILLING A BOTTLE DO NOT EXCEED THE MAXIMUM PRESSURE INDICATED ON THE PLACARD.

(1)Check that pressure gage at nitrogen bottle of door damper indicates pressure shown on placard (Ref. 11-32-52, P. Block 1).

NOTE : Placard is situated on the top of support arm or on the door frame lining forward of support arm.

** ON FWD PASSENGER/CREW DOOR

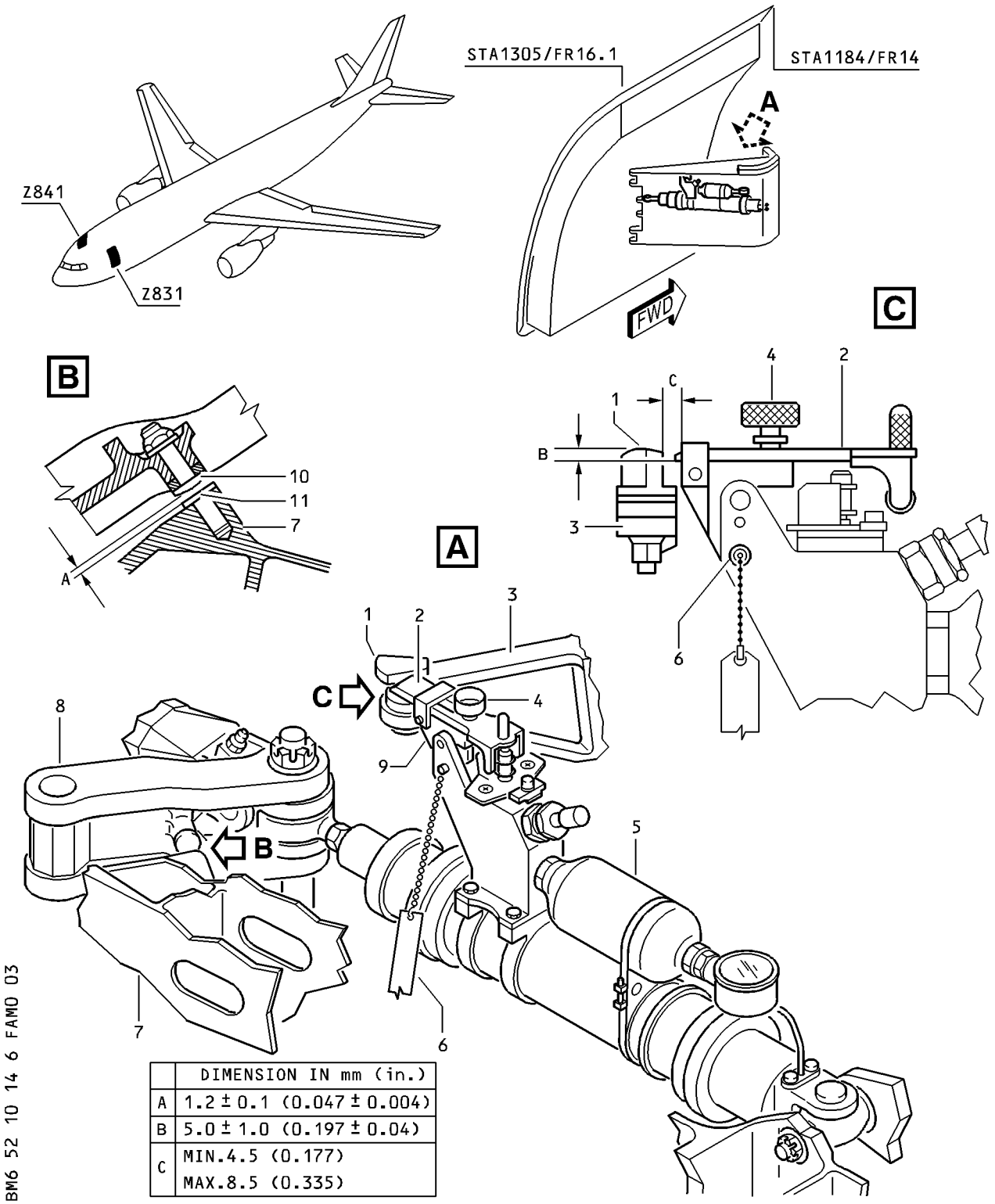
(2)Check door damper kinematics as follows:
(a)Move opened door inboard so that its door seal touches front and rear door frame of fuselage.
(b)Measure the gap "A" between stop bolt (10) of fork-end and stop (11) of support arm (7) with a feeler gage.

NOTE : The gap must be between 1.2 ± 0.1 mm (0.047 ± 0.004 in.).

(c)If gap "A" is out of tolerance, carry out an adjustment (Ref. 52-10-14, P. Block 501).

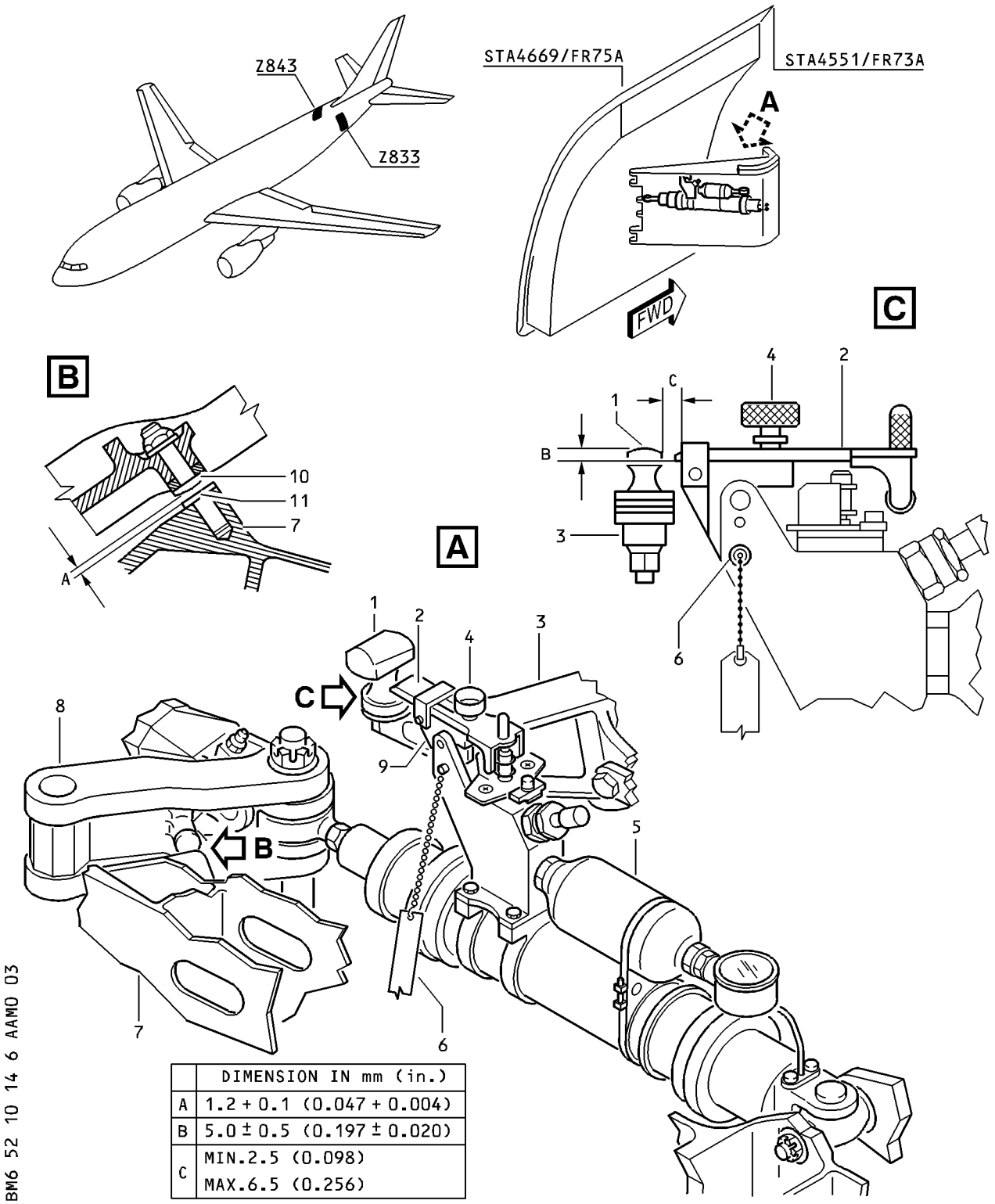
(3)Check emergency release mechanism as follows:
(a)Make sure that applicable door is closed and in following condition:
- the emergency control handle is moved to its fully forward (armed) position,
- the release lever (2) of door damper (5) is fully retracted in its saftied position,
- the percussion mechanism of door damper (5) is blocked with related stowage pin (6).

(b)Measure distance "B" between lower edge of release lever (2) and top of door stop (1) as follows:
1 Operate interior control handle to lift door, but do not open it at this stage.
2 Loosen knurled screw (4) and carefully extend release lever (2) until it contacts door stop (1).



Emergency Release Mechanism and
Door Damper Kinematics - FWD Door
Figure 601

R



	DIMENSION IN mm (in.)
A	1.2 + 0.1 (0.047 + 0.004)
B	5.0 ± 0.5 (0.197 ± 0.020)
C	MIN.2.5 (0.098) MAX.6.5 (0.256)

BM6 52 10 14 6 AAMO 03

Emergency Release Mechanism and
Door Damper Kinematics - AFT Door
Figure 602

R

3 Mark position of lower edge of release lever (2) on door stop (1) with a sharp pencil.
4 Retract release lever (2) and secure it with knurled screw (4).
5 Measure distance "B" between pencil mark and top of door stop (1).

NOTE :The distance must be between 5.0 ± 1.0 mm (0.2 ± 0.04 in.).

6 If distance "B" is out of tolerenace, carry out an adjustment (Ref. 52-10-14, P. Block 501).

(c)Measure gap "C" between door stop (1) and operating lever (9).

R NOTE : The gap "C" must be between 4.5 and 8.5 mm
R (0.177 and 0.335 in.).
If not, carry out adjustment (Ref. 52-10-14, P. Block 501).

(d)Move emergency control handle to its fully aft (disarmed) position and safety it with related safety pin.
(e)Open door.

** ON AFT PASSENGER/CREW DOOR

(2)Check door damper kinematics as follows:
(a)Move opened door inboard so that its door seal touches front and rear door frame of fuselage.
(b)Measure the gap "A" between stop bolt (10) of fork-end and stop (11) of support arm (7) with a feeler gage.

NOTE : The gap must be between 1.2 + 0.1 mm (0.047 + 0.004 in.).

(c)If gap "A" is out of tolerance, carry out an adjustment (Ref. 52-10-14, P. Block 501).

(3)Check emergency release mechanism as follows:
(a)Make sure that applicable door is closed and in following condition:
- the emergency control handle is moved to its fully forward (armed) position,
- the release lever (2) of door damper (5) is fully retracted in its saftied position,
- the percussion mechanism of door damper (5) is blocked with related stowage pin (6).

(b)Measure distance "B" between lower edge of release lever (2) and top of door stop (1) as follows:
1 Operate interior control handle to lift door, but do not open it at this stage.
2 Loosen knurled screw (4) and carefully extend release lever (2) until it contacts door stop (1).
3 Mark position of lower edge of release lever (2) on door stop (1) with a sharp pencil.
4 Retract release lever (2) and secure it with knurled screw (4).
5 Measure distance "B" between pencil mark and top of door stop (1).

NOTE :The distance must be between 5.0 ± 0.5 mm (0.2 ± 0.02 in.).

6 If distance "B" is out of tolerenace, carry out an adjustment (Ref. 52-10-14, P. Block 501).

(c)Measure gap "C" between door stop (1) and operating lever (9).

R NOTE : The gap "C" must be between 2.5 and 6.5 mm
R (0.098 and 0.256 in.).
If not, carry out adjustment (Ref. 52-10-14, P. Block 501).

(d)Move emergency control handle to its fully aft (disarmed) position and safety it with related safety pin.
(e)Open door.

** ON ALL PASSENGER/CREW DOORS

D. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install support arm lining (Ref. 52-10-13, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(3)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(4)Close door.
(5)Remove access platform.

FWD, AFT DOOR SEAL - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door seal are identical in design and function but are opposite hand. The LH door seal only is described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B.	Torque Wrench, 0.25 to 0.35 m.daN (22 to 31 lbf.in.)
C. Material No. 05-001	Special Materials (Ref. 20-31-00)
D. Material No. 09-016	Sealants (Ref. 20-31-00)
E. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)
R F. Material No. 16-003	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-00, P. Block 701	Passenger/Crew Doors

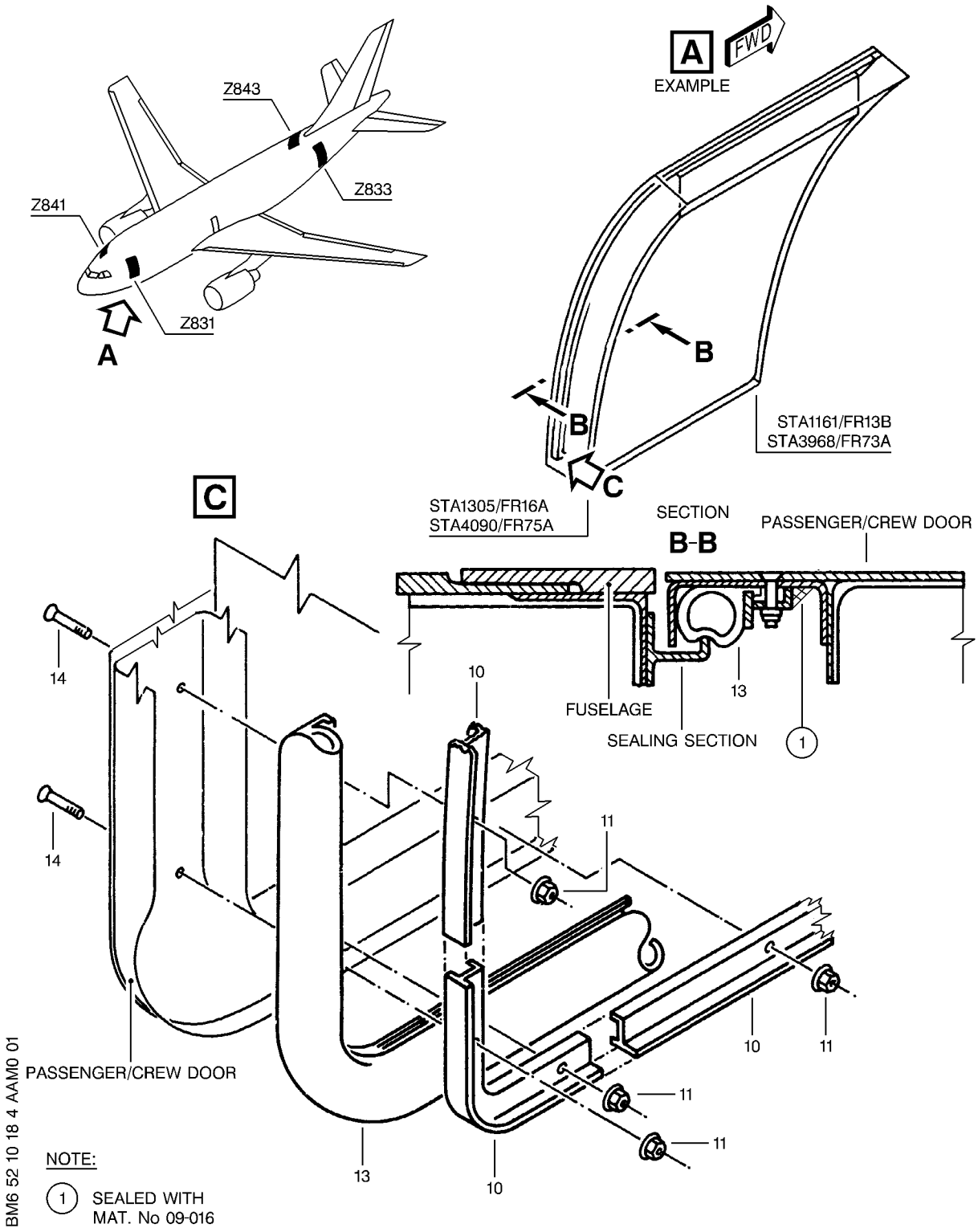
2. Procedure

(Ref. Fig. 401)
(Ref. Fig. 402)

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open door.

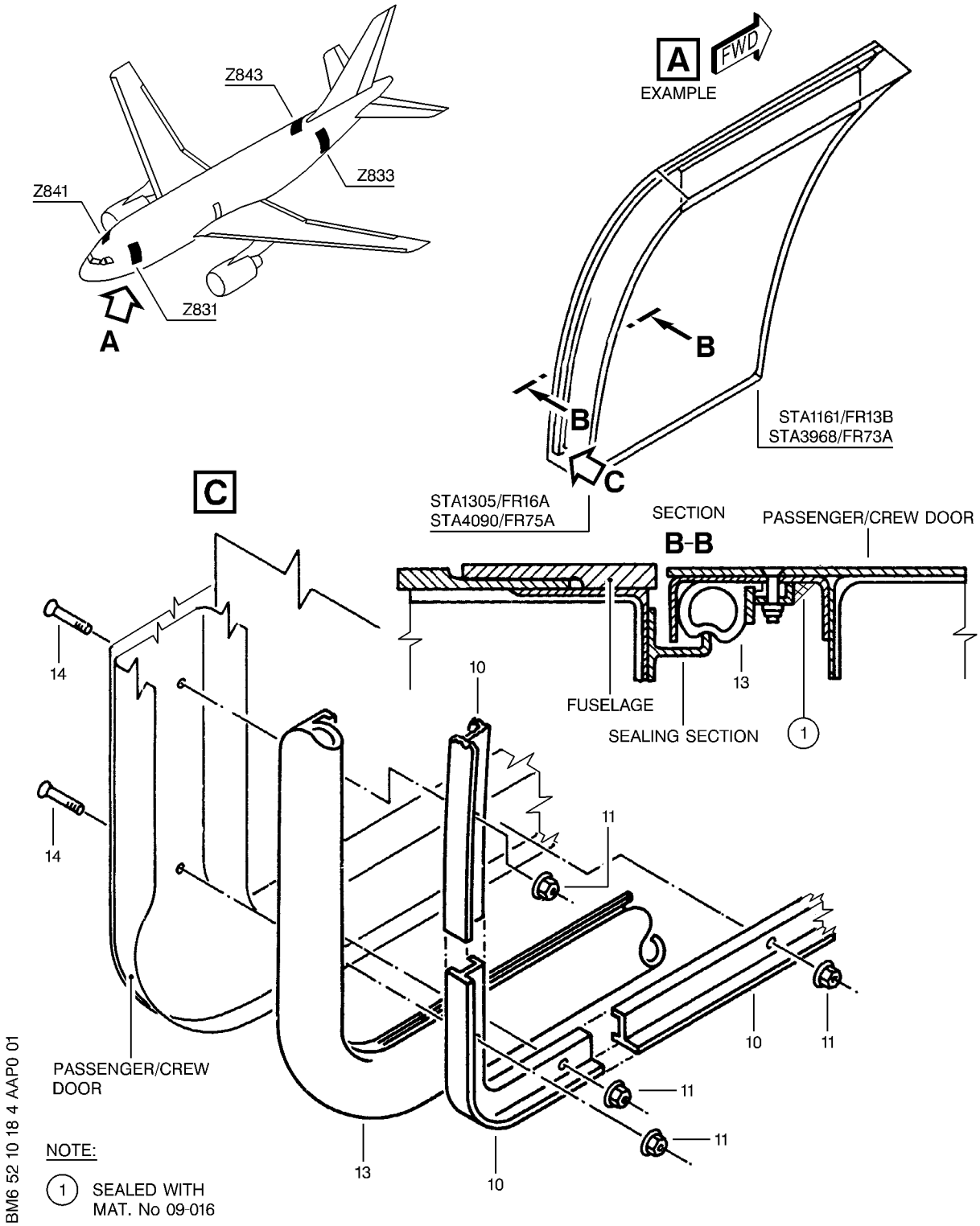
B. Removal
(1)Remove nuts (11), screws (14) and retainers (10).
NOTE : Screws (14) are of different lengths. Maintain identity of location for subsequent refitment.
(2)Remove door seal (13).

C. Preparation for Installation
(1)Clean seal and contact area using cleaning agent (Material No. 11-008).



FWD and AFT Passenger/Crew Doors
Door Seal (Circular Shape)
Figure 401

R



FWD and AFT Passenger/Crew Doors
Door Seal (Square Shape)
Figure 402

R

D. Installation

NOTE : Fastening screws for door seal must be coated with sealant (Material No. 09-016) before inserting them into door counterbores.

(1)Coat screws (14) with sealant (Material No. 09-016).

(2)Install door seal (13) with retainers (10), screws (14) and nuts (11).

(3)TORQUE nuts (11) to between 0.25 and 0.35 m.daN (22 and 31 lbf in.).

R (4)Apply a bead of sealant (Material No. 09-016) between the retainers
R and the door structure.

R (5)Let the sealant dry and coat it with lacquer (Material No. 16-003).

R (6)Protect door seal (13) with silicone grease (Material No. 05-001).

NOTE : For repairing outer door skin paint damage caused by the removal and installation of the attachment screws (14) refer to cleaning/painting, 52-10-00, P. Block 701.

E. Test

(1)Close door and check that door seal is compressed throughout its length.

NOTE : If the seal is not compressed throughout its length, remedial action must be taken as detailed in the Structural Repair Manual.

F. Close-Up

(1)Open door.

(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(3)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).

(4)Close door.

(5)Remove access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).
WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS AND A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT. AVOID INHALING FUMES.

1. Reason for the Job

A. Repair of:
NOTE : Item numbers correspond with operations in 3.B.
(1)Chafe marks.
(2)Cuts up to 25.4 mm (1.0 in.) in length and not in contact area of seal.
(3)Chafe marks and cuts exceeding 25.4 mm (1.0 in.) in length or in contact area of seal by replacement of section.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.60 to 5.20 m (15 to 17 ft.)
B.	C-Clamp
C.	Wooden Bonding Block
D.	Lint-Free Cloths
E.	Sharp Knife and Scissors
F.	Medium-Sized Spatula
G.	Emery Cloth
H. Material No. 05-023	Special Materials (Ref. 20-31-00)
I. Material No. 05-024	Special Materials (Ref. 20-31-00)
J. Material No. 08-004	Bonding and Adhesive Compounds (Ref. 20-31-00)
K. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
Referenced Procedures	
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-18, P. Block 401	FWD, AFT Door Seal

3. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open door.
(4)Remove seal from door (Ref. 52-10-18, P. Block 401).

B. Approved Repairs
(Ref. Fig. 801)
R (Ref. Fig. 802)
(Ref. Fig. 803)
R (Ref. Fig. 804)

(1)Repair of chafe marks.

NOTE : If chafe marks are in contact area of door seal, replace this section of door seal (Ref. para. 3.(B).(3)).

(a)Slightly abrade chafe mark using emery cloth.

WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS.

(b)Carefully degrease chafe mark with cleaning agent, (Material No. 11-004), and a lint-free cloth.

(c)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to chafe mark and smooth with a spatula.

(d)Protect treated chafe mark against dust and allow bonding and adhesive compound (Material No. 08-004) to dry for 10 to 12 hours.

(2)Repair of cuts up to 25.4 mm (1.0 in.) in length and not in contact area of seal.

NOTE : If cuts are in contact area of door seal, replace this section of door seal (Ref. para. 3.(B).(3)).

(a)Drill stop holes of dia. 2 mm (0.08 in.) at ends of cuts.

(b)Open cut by applying pressure to seal and slightly abrade faces of cut using emery cloth.

(c)Carefully remove the first layer of tissue reinforcement from door seal in area of 10 mm (0.40 in.) around cut (repair area).

(d)Prepare surface of repair area with emery cloth.

WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS.

(e)Carefully degrease repair area with cleaning agent, (Material No. 11-004) and a lint-free cloth.

(f)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to faces of cut.

(g)Press faces of cut together as far as possible and allow them to dry for some minutes.

(h)Cut a piece of tissue (Material No. 05-024), to a size necessary to insert it in repair area.

(i)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to repair area and to fill stop holes,at end of cut.

(j)Position piece of tissue (Material No. 05-024) in repair area.

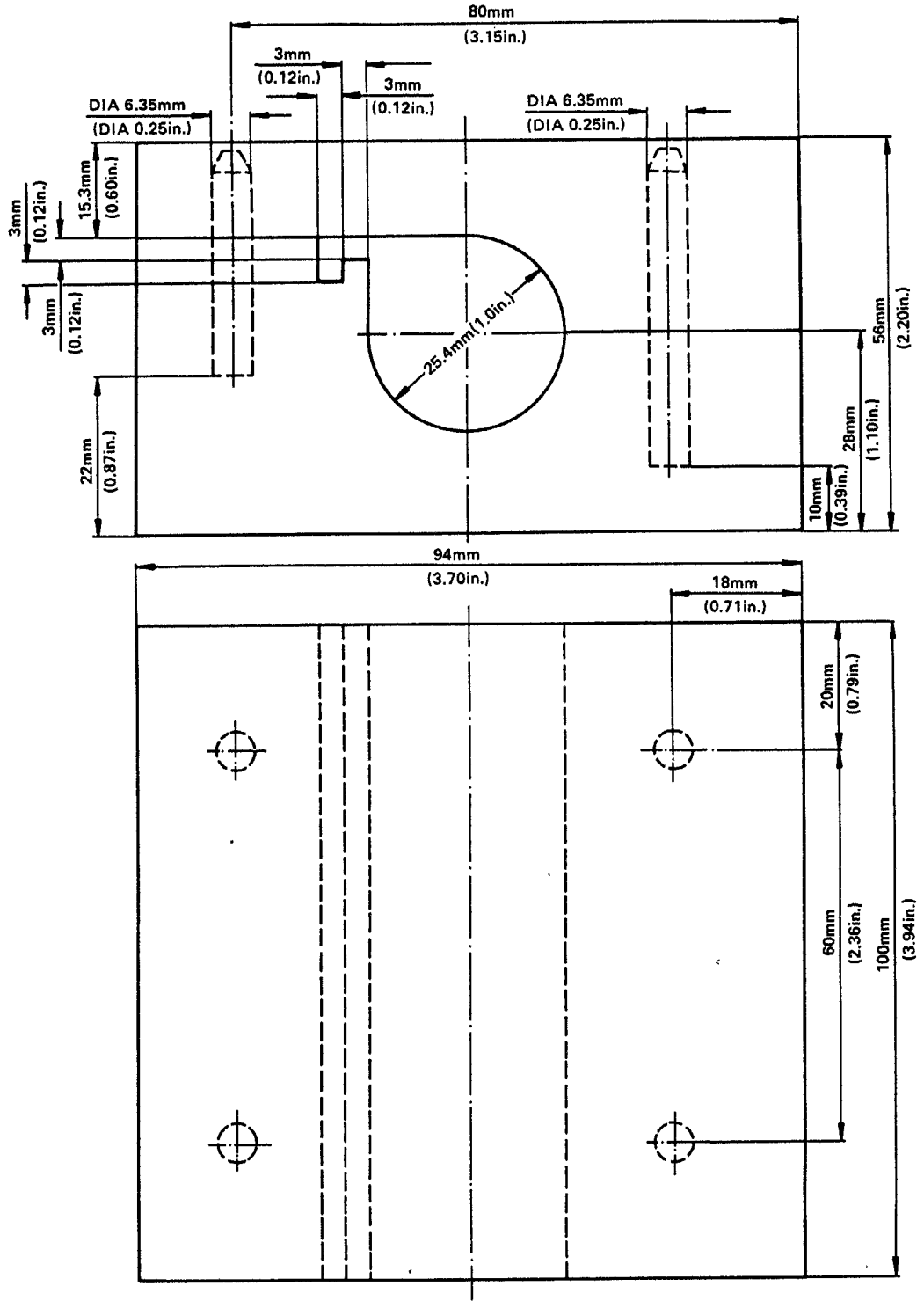
(k)Cover repair with a layer of foil (Material No. 05-023), and position in wooden bonding block.

(l)Compress seal in wooden bonding block using C-clamp.

(m)Allow bonding and adhesive compound (Material No. 08-004) to dry for 24 hours.

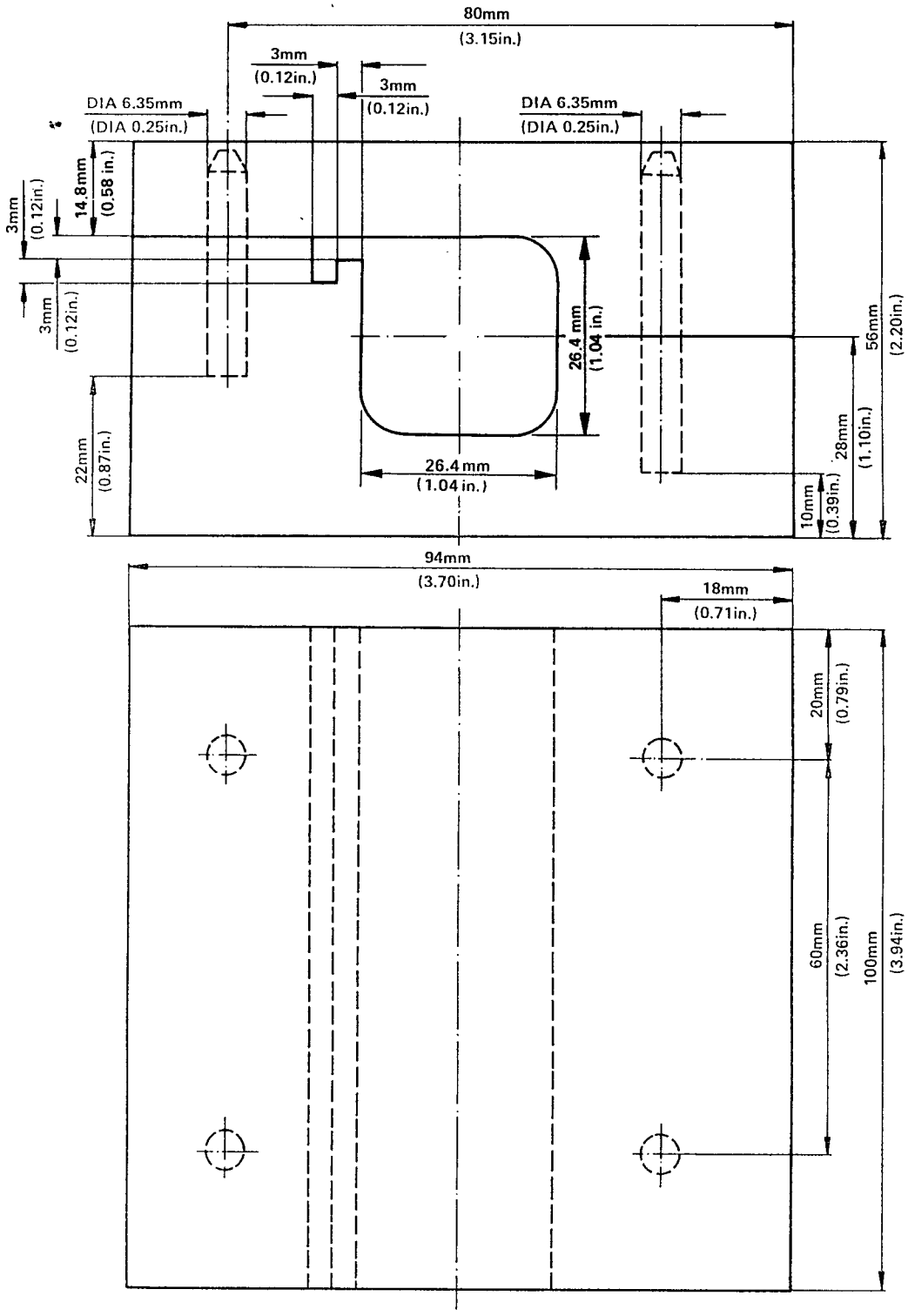
(n)Remove bonding block and foil.

(o)Remove excessive adhesive compound using emery cloth.



BM3 52 10 18 8 AAM0 25

Wooden Bonding Block
Figure 801

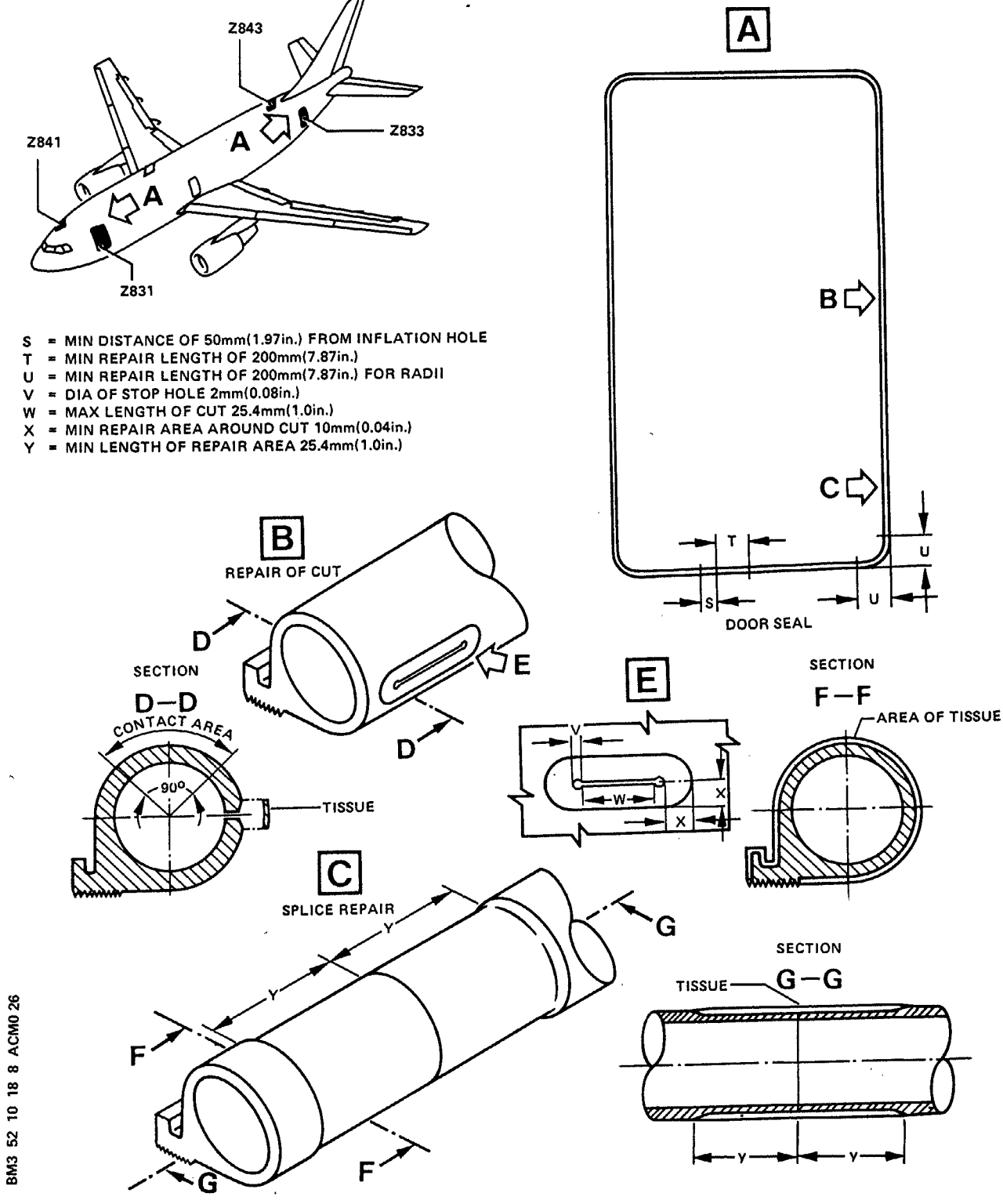


BM6 52 10 18 8 AAP0 00

Wooden Bonding Block
Figure 802

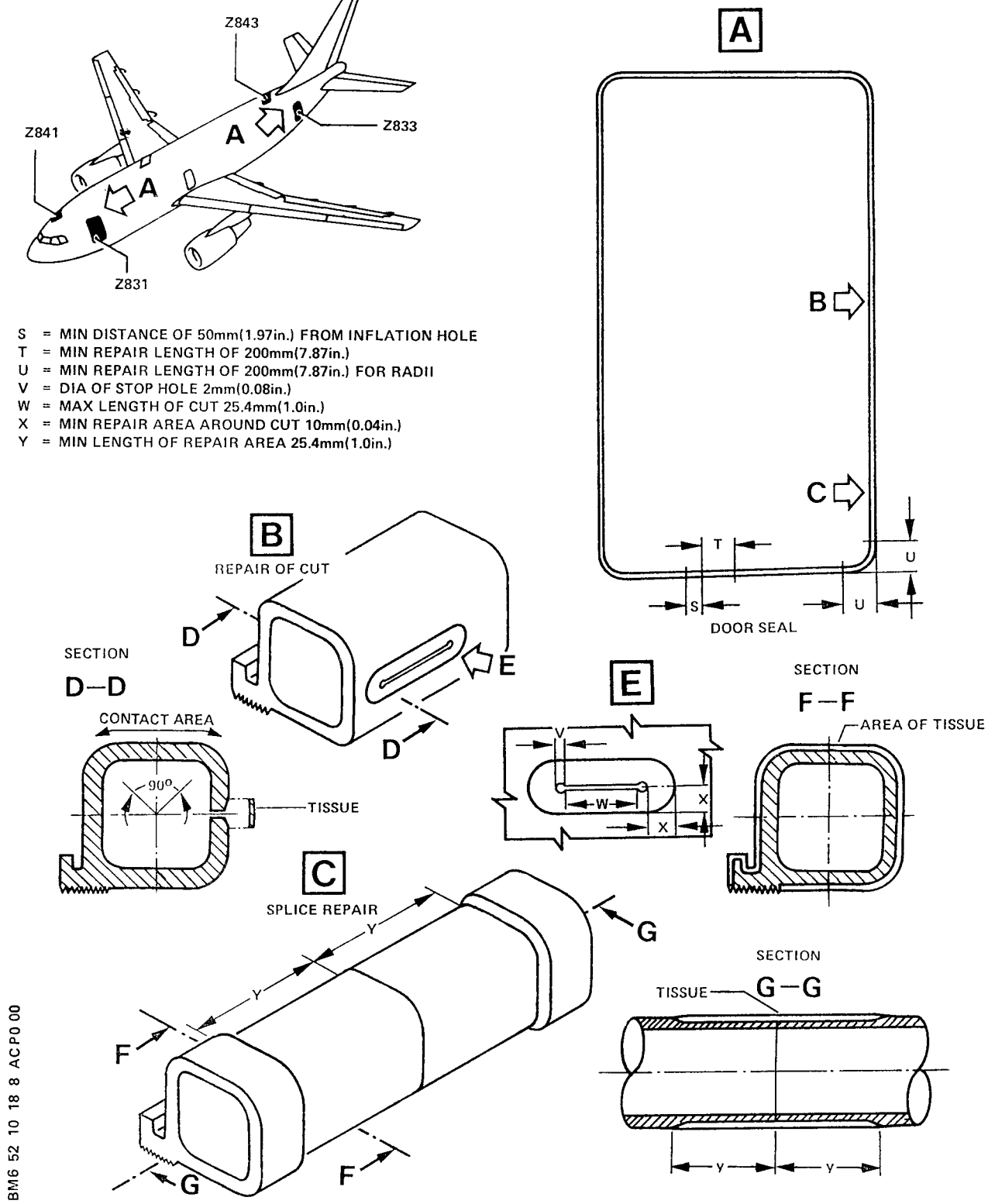
R

S = MIN DISTANCE OF 50mm(1.97in.) FROM INFLATION HOLE
T = MIN REPAIR LENGTH OF 200mm(7.87in.)
U = MIN REPAIR LENGTH OF 200mm(7.87in.) FOR RADII
V = DIA OF STOP HOLE 2mm(0.08in.)
W = MAX LENGTH OF CUT 25.4mm(1.0in.)
X = MIN REPAIR AREA AROUND CUT 10mm(0.04in.)
Y = MIN LENGTH OF REPAIR AREA 25.4mm(1.0in.)



Repair of Damage
Figure 803

S = MIN DISTANCE OF 50mm(1.97in.) FROM INFLATION HOLE
T = MIN REPAIR LENGTH OF 200mm(7.87in.)
U = MIN REPAIR LENGTH OF 200mm(7.87in.) FOR RADII
V = DIA OF STOP HOLE 2mm(0.08in.)
W = MAX LENGTH OF CUT 25.4mm(1.0in.)
X = MIN REPAIR AREA AROUND CUT 10mm(0.04in.)
Y = MIN LENGTH OF REPAIR AREA 25.4mm(1.0in.)



BM6 52 10 18 8 ACP0 00

Repair of Damage
Figure 804

R

(3)Repair of chafe marks and cuts exceeding 25.4 mm (1.0 in.) in length or in contact area by replacement of section.
(a)Cut door seal at a minimum distance of 50.0 mm (1.97 in.) from next inflation holes to remove damaged section of door seal.
NOTE : Minimum repair length if replacement section is:
- for straight section: 200.0 mm (7.87 in.),
- for curved section: 200.0 mm (7.87 in.) measured from edge corner.
(b)For curved sections, cut and remove damaged seal to same length as replacement curved section.
(c)For straight sections, cut a section of replacement door seal to same length as removed section.
NOTE : Make certain that quantity of inflation holes are the same as in the removed section.
(d)Carefully remove the first layer of tissue reinforcement from ends of door seal and replacement section over a length of 25.4 mm (1.0 in.) (repair area).
(e)Slightly abrade faces of door seal and replacement section with emery cloth.
WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS.
(f)Carefully degrease repair area of door seal and replacement section with cleaning agent (Material No. 11-004) and a lint-free cloth.
(g)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to faces of cuts.
(h)Insert replacement section in door seal.
(i)Press end faces of door seal and replacement section together and allow them to dry for some minutes.
(j)Cut tissue (Material No. 05-024) to size of repair area.
(k)Apply a coat of adhesive compound (Material No. 08-004) to mating surfaces of tissue and seal.
(l)Position tissue (Material No. 05-024) around repair area.
(m)Cover repair area with a layer of foil (Material No. 05-023).
(n)Position door seal in wooden bonding block.
(o)Compress seal in wooden bonding block using C-clamp.
(p)Allow bonding and adhesive compound (Material No. 08-004) to dry for 24 hours.
(q)Remove bonding block and foil.
(r)Remove excessive adhesive compound using emery cloth.

C. Close-Up
(1)Install repaired seal on door (Ref. 52-10-18, P. Block 401).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Arm emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(4)Close door.
(5)Remove access platform.

FWD, AFT DOOR LOCKING MECHANISM - ADJUSTMENT/TEST

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Reason for the Job

A. To ensure correct locking of the door the following must be adjusted:
NOTE : Item numbers correspond with operations in Para. 3.B.
(1)Door Locking
(2)Door Closed Position
(3)Door High Position
(4)Locking of Door Mechanism in High Position
(5)Exterior Control Handle
(6)Interior Control Handle

2. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 4.60 to 5.20 m (15 to 17 ft.)
	B. 98A52108007001	Tool Set - R/I MID and AFT Passenger/Crew Doors
	C. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
	or 98A52108008001	Support Frame - Ballast Weight, Doors **NOTE** : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
	D.	Torque Wrench, 0 to 1 m.daN (0 to 88.5 lbf.in.)
	E.	Measuring Tools
R	F.	Dial Indicator
R	G.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.025 in.)
R	H. Material No. 04-017	Common Greases (Ref. 20-31-00)
R	J. Material No. 05-005	Special Materials (Ref. 20-31-00)
R	K. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 12-22-52, P. Block 1	Doors
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation

Printed in France

3. Procedure

A. Job Set-Up

NOTE : Steps (4), (5) and (6) are required only for adjustment of door locking, door closed position, door high position and locking of door mechanism in high position.

(1)Position access platform.
(2)Open door.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(3)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(4)Remove door lining and insulation (Ref. 52-10-13, P. Block 401).
(5)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
(6)Install ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.

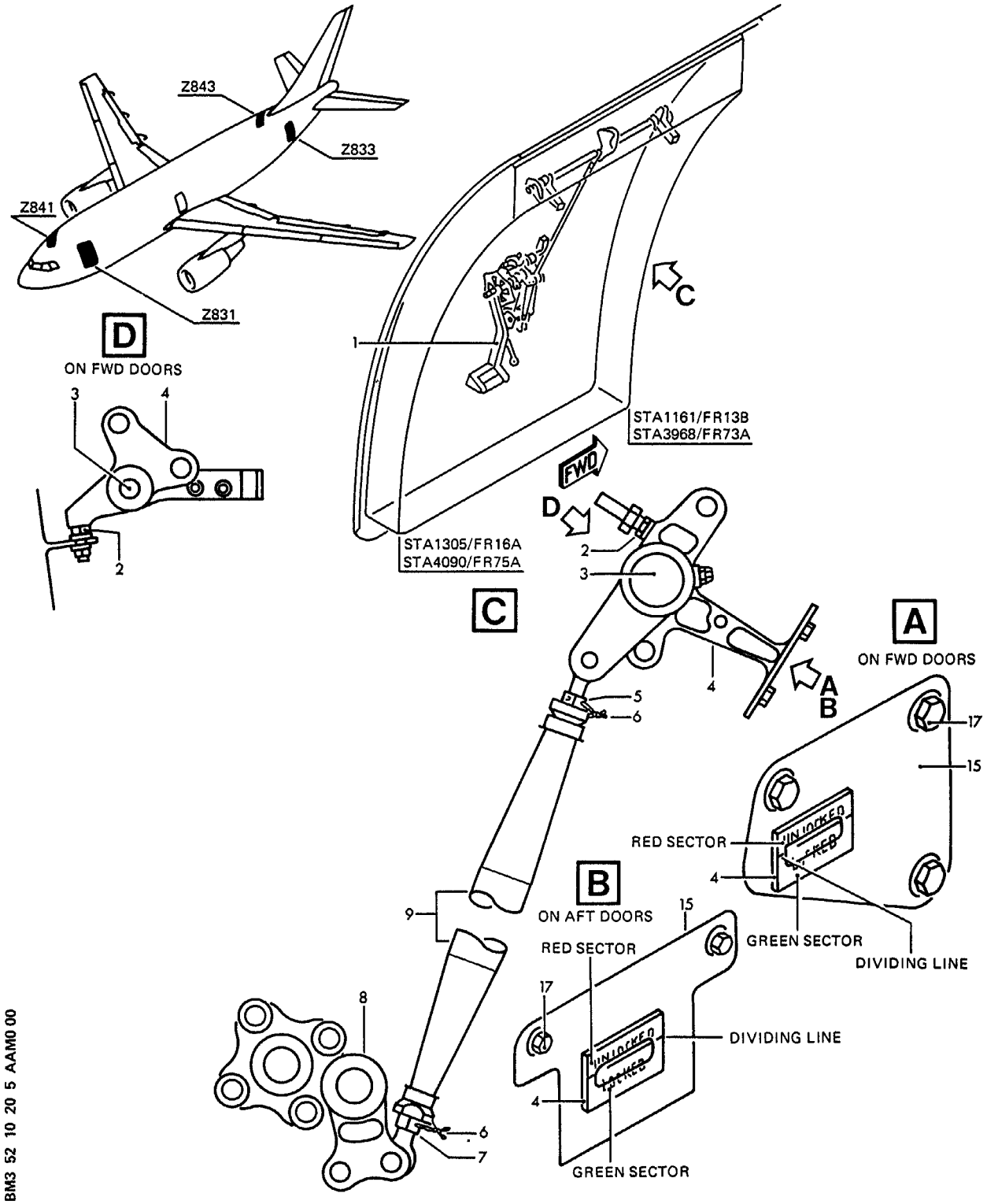
B. Adjustment
(1)Door Locking
(Ref. Fig. 501)
(a)Close door.
(b)Cut and remove lockwire (6).
(c)Loosen nuts (5),(7).
(d)Adjust rod (9) between locking shaft (3) and gear box (8) so that interior control handle (1) stays in locked position and crank levers (4) contact stops (2).
NOTE : For adjustment, retract interior control handle (1) until rod is unloaded.
(e)Tighten nuts (5),(7).
(f)Install lockwire (6).

** ON FWD DOOR SERIAL NOS ALL

(g)Lift door and insert 1.0 mm (0.04 in.) feeler gages between stop (2) and crank levers (4) of locking shaft (3).

** ON AFT DOOR SERIAL NOS 1162 AND SUBSEQUENT

(g)Lift door and insert 0.9 mm (0.035 in.) feeler gages between stop (2) and crank levers (4) of locking shaft (3).



FWD and AFT Passenger/Crew Doors -
Locking Indication
Figure 501

** ON FWD AND AFT DOOR SERIAL NOS ALL

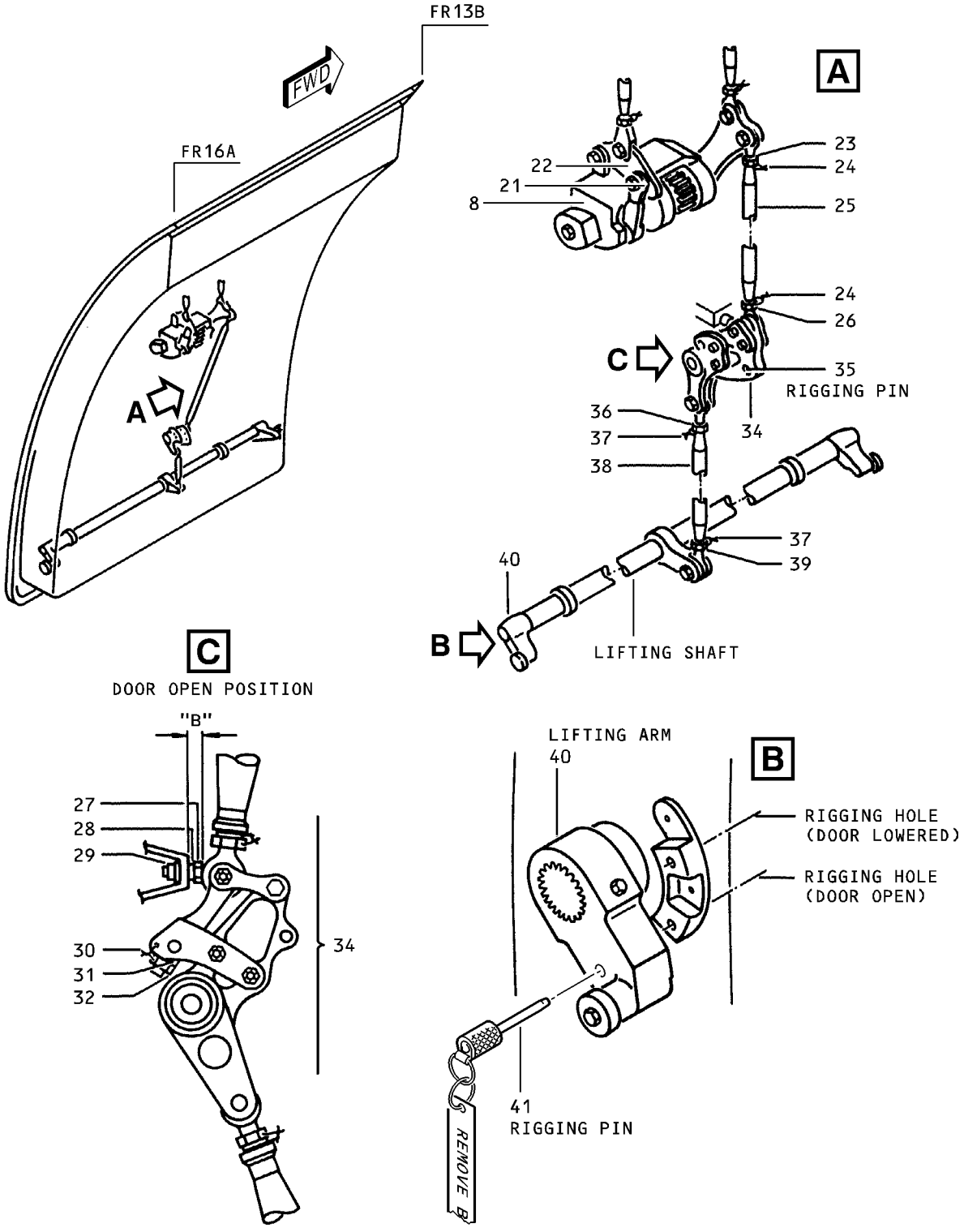
(h)Lower door.
(i)Check that line dividing red and green sectors of crank levers (4) is aligned with upper edge of apertures in locking indicators (15).
(j)If line dividing red and green sectors of crank levers (4) is not aligned with upper edge of apertures in locking indicators (15), proceed as follows:
1 Loosen screws (17) and adjust locking indicators (15) so that line dividing red and green sectors of crank levers (4) is aligned with upper edge of apertures in locking indicators (15).
2 Tighten screws (17).
(k)Lift door and remove feeler gages.
(l)Check indication of door warning system (Ref. 52-71-11, P. Block 501).

(2)Door Closed Position

** ON FWD PASSENGER/CREW DOORS

(Ref. Fig. 502)
(a)Remove stops from guide fittings (Ref. 52-10-11, P. Block 501).
(b)Open door.
(c)Check that hook (22) of door high position locking mechanism is fully engaged on roller (21).
(d)If requirement per step (c) is not satisfied, proceed as follows:
1 Insert rigging pin (35) in twin lever (34).
2 If rigging pin (35) cannot be inserted, proceed as follows:
a Cut and remove lockwire (24) from rod (25) between gear box (8) and twin lever (34) and loosen nuts (23),(26).
b Adjust rod (25) until hook (22) is fully engaged on roller (21).
NOTE : For adjustment retract interior control handle until rod is unloaded.
c Tighten nuts (23),(26) and secure with lockwire (24).

R (e)Insert rigging pin (41) in the lifting arm (40) (door open position).
(f)If rigging pin (41) cannot be inserted, proceed as follows:
1 Cut and remove lockwire (37) from rod (38) between twin lever (34) and lifting shaft and loosen nuts (36),(39).
2 Adjust rod (38) until rigging pin (41) can be inserted.
NOTE : For adjustment retract interior control handle until rod is unloaded.
3 Tighten nuts (36),(39) and secure with lockwire (37).
(g)Remove rigging pins (35),(41).
R (h)Make sure that the door is open approximately 40 cm (15.75 in.) (measured from door sill).
R (j)Move roller lever of lowering shaft (86) outboard to release the locking mechanism (Ref. Fig. 505,) and hold it until the door is lowered.
R (k)Carefully move the internal handle (1) down to lower the door.
R (l)Remove self-locking nut (29), washer (28) and stop (27).



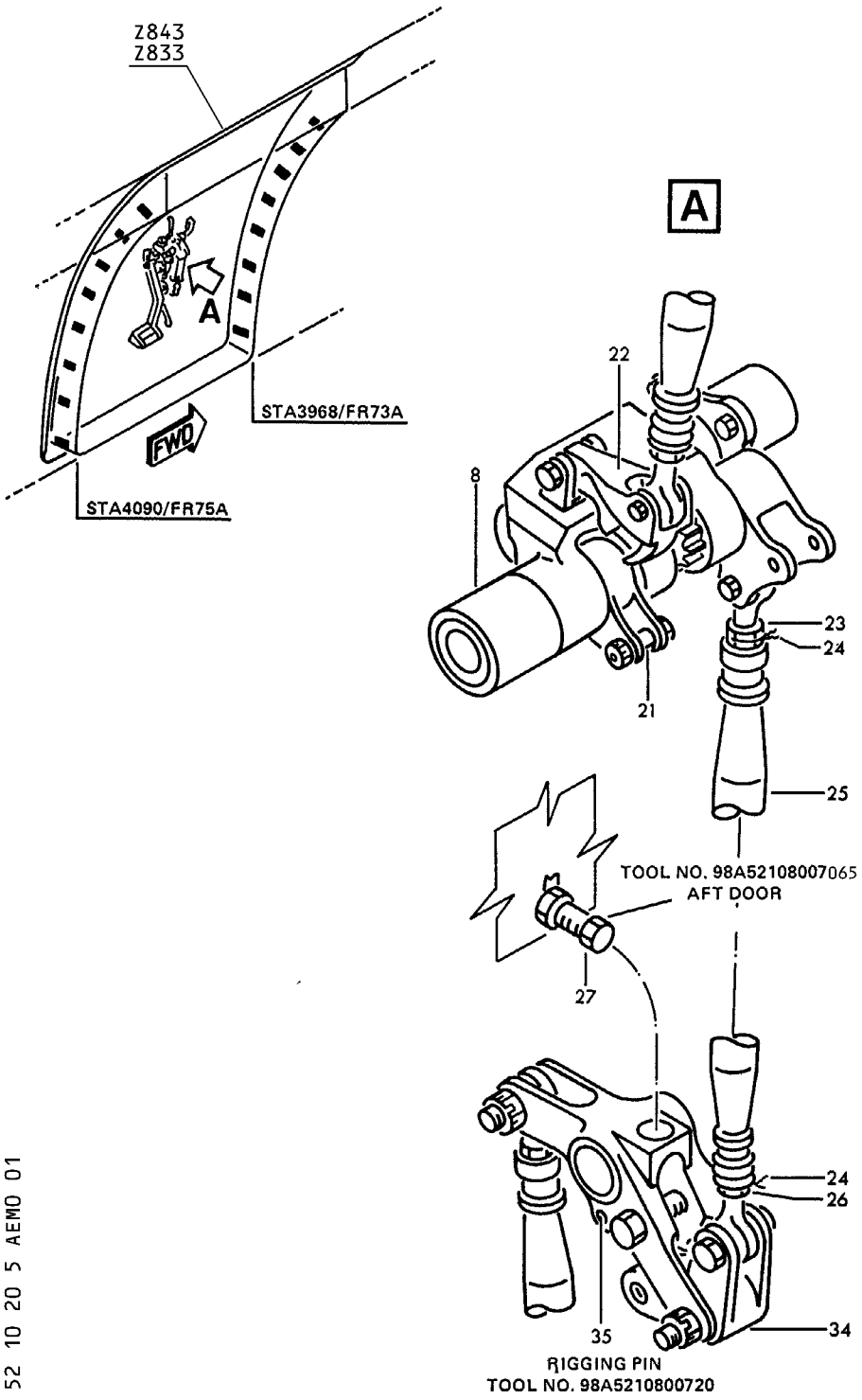
FWD Passenger/Crew Doors -
Gear Box, Twin Lever and Lifting Shaft
Figure 502

R (m)Insert rigging pin (41) from the outer aft side through the
R lifting arm (40) of the lifting shaft.

R (n)If rigging pin (41) cannot be inserted, proceed as follows:
1 Cut and remove lockwire (30) and nut (32).
2 Select appropriate adjustment washers (31) until rigging pin (41)
R for lifting arm (40) can be inserted.
NOTE : Thickness of adjustment washer (31) between 1 and 7 mm (0.04 and 0.28 in.).
3 Install washer (31) and nut (32).
4 TORQUE nut (32) to between 0.3 and 0.35 m.daN (26 and 31 lbf.in.) and secure with lockwire (30).
R (o)Remove rigging pin (41) from lifting arm (40).
R (p)Lift door and insert rigging pins (35),(41).
R (q)If rigging pins (35),(41) cannot be inserted, proceed per step (d) thru (m).
R (r)Measure gap "B".
R (s)Select appropriate adjustment washer (28) (Gap "B" = bolt head + adjustment washer).
R (t)Remove rigging pins (35),(41).
R (u)Place door in lowered position.
R (v)Remove rod (25) from twin lever (34) with cotter pin, nut, washers and bolt.
R (w)Press twin lever (34) down.
R (x)Re-install stop (27), selected adjustment washer (28) and self-locking nut (29).
R (y)Install rod (25) with bolts, washers and nut.
R (z)TORQUE nut to max. 0.3 m.daN (26 lbf.in.) and back off to next cotter pin hole.
R (aa)Install new cotter pin.
R (ab)Install and adjust stops in guide fittings (Ref. 52-10-11, P. Block 501).

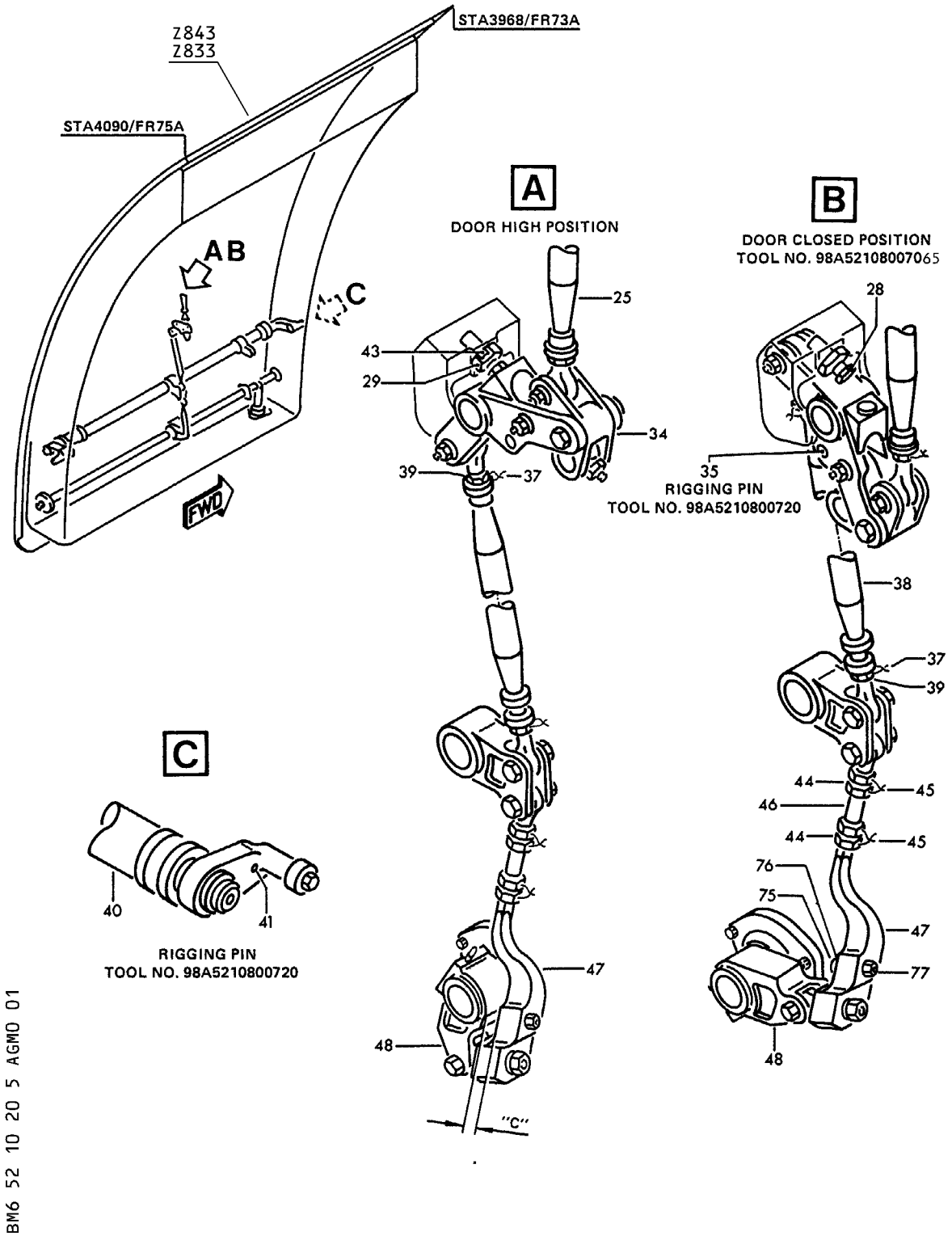
** ON AFT PASSENGER/CREW DOORS

(Ref. Fig. 503)
(Ref. Fig. 504)
(a)Remove stops from guide fittings (Ref. 52-10-11, P. Block 501).
(b)Close door.
(c)Insert rigging pin (35) in twin lever (34).



BM6 52 10 20 5 AEMO 01

AFT Passenger/Crew Doors -
Gear Box and Twin Lever
Figure 503



AFT Passenger/Crew Doors -
Twin Lever and Rod from Torsion Bar Spring
Figure 504

(d)If rigging pin (35) cannot be inserted, proceed as follows:
1 Cut and remove lockwire (24) from rod (25) between twin lever (34) and gear box (20) and loosen nuts (23),(26).
2 Adjust rod (25) until rigging pin (35) can be inserted.
NOTE : For adjustment retract interior control handle until rod is unloaded.
3 Tighten nuts (23),(26) and secure with lockwire (24).
(e)Insert rigging pin (41) in lifting shaft (40).
(f)If rigging pin (41) cannot be inserted, proceed as follows:
1 Remove rigging pin (35) from twin lever (34).
2 Cut and remove lockwire (37) from rod (38) between twin lever (34) and lifting shaft (40) and loosen nuts (39),(36).
3 Adjust rod (38) until rigging pin (41) can be inserted.
NOTE : For adjustment retract interior control handle until rod is unloaded.
4 Tighten nuts (39),(36) and secure with lockwire (37).
NOTE : For tightening and securing upper nut (36) open door.
(g)Remove rigging pin (41) and open door.
(h)Insert rigging pin (41) in lifting shaft (40) (door open) and check that twin lever (34) just contacts stop (27).
(i)If rigging pin (41) cannot be inserted and/or twin lever (34) does not just contact stop (27), proceed as follows:
1 If inserted, remove rigging pin (41) and lower door in open position.
2 Release locking washer (43) and locknut (42).
3 Remove stop (27) and remove and discard locking washer (43).
4 Position new locking washer (43) and install stop (27).
5 Lift door.
6 Insert rigging pin (41).
7 Adjust stop (27) so that twin lever (34) contacts stop (27).
8 TORQUE locknut (42) to between 0.54 and 0.59 m.daN (48 and 52 lbf.in.) and secure with locking washer (43).
9 Remove rigging pin (41).
(j)Adjust gap "C" as follows:
1 Open door and insert rigging pin (41).
2 Check that gap "C" between rod assy (47) and torque shaft (49) is between 4.0 and 8.0 mm (0.16 and 0.32 in) and that stop (75) just contacts bellcrank (48).
3 If gap "C" is not satisfied and/or stop (75) does not just contact bellcrank (48), proceed as follows:
a Remove rigging pin (41) from lifting shaft (40) and lower door in open position.
b Release tension of torsion bar spring (Ref. 52-10-11, P. Block 501).
c Remove nut (77), stop (75) and shims (76).
d Install stop (75) and nut (77).
e Lift door and insert rigging pin (41) in lifting shaft (40).
f Cut and remove lockwire (45) from rod assy (47) and loosen nuts (44).

g Adjust rod assy (47) so that gap "C" is between 4.0 and 8.0 mm (0.16 and 0.32 in.).
h Measure gap between stop (75) and bellcrank (48) for subsequent installation of shims (76).
i Tighten nuts (44) and secure with lockwire (45).
j Remove rigging pin (41) from lifting shaft (40) and lower door in open position.
k Remove nut (77) and stop (75).
l Position shims (76) as measured and install stop (75) and nut (77).
m Lift door.
n Adjust tension of torsion bar spring (Ref. 52-10-11, P. Block 501).

(k) Install and adjust stops in guide fittings (Ref. 52-10-11, P. Block 501).

** ON FWD AND AFT PASSENGER/CREW DOORS

(3)Door High Position (Ref. Fig. 503, 504)

** ON FWD PASSENGER/CREW DOORS

For adjustment "Door High Position" refer to adjustment block "Door Closed Position" Para. 3.B.(2).

** ON AFT PASSENGER/CREW DOORS

(a)Lift door.
(b)Insert rigging pin (41) in lifting shaft (40) and check that twin lever (34) just contacts stop (27).
(c)If rigging pin (41) cannot be inserted and/or twin lever (34) does not just contact stop (27), proceed as follows:
1 If inserted, remove rigging pin (41) and lower door in open position.
2 Release locking washer (43) and locknut (42).
3 Remove stop (27) and remove and discard locking washer (43).
4 Position new locking washer (43) and install stop (27).
5 Lift door.
6 Insert rigging pin (41) in lifting shaft (40).
7 Adjust stop (27) so that twin lever (34) contacts stop (27).
8 TORQUE locknut (42) to between 0.54 and 0.59 m.daN (48 and 52 lbf.in.) and safety with locking washer (43).
(d)Check that gap "C" between rod assy (47) and bellcrank (48) of torque shaft (49) is between 4.0 and 8.0 mm (0.16 and 0.32 in.) and stop (75) just contacts bellcrank (48).
(e)If gap "C" is not between 4.0 and 8.0 mm (0.16 and 0.32 in.) and/or stop (75) does not just contact bellcrank (48), proceed as follows:
1 Remove rigging pin (41) from lifting shaft (40) and lower door in open position.
2 Release tension of torsion bar spring (Ref. 52-10-11, P. Block 501).
3 Remove nut (77), stop (75) and shims (76).
4 Install stop (75) and nut (77).

5 Lift door and insert rigging pin (41) in lifting shaft (40).
6 Cut and remove lockwire (45) from rod assy (47) and loosen nuts (44),(46).
7 Adjust rod assy (47) so that gap "C" is between 4.0 and 8.0 mm (0.16 and 0.32 in.).
8 Measure gap between stop (75) and bellcrank (48) for subsequent installation of shims (76).
9 Tighten nuts (44),(46) and secure with lockwire (45).
10 Remove rigging pin (41) from lifting shaft (40) and lower door in open position.
11 Remove nut (77) and stop (75).
12 Position shims (76) as measured and install stop (75) and nut (77).
13 Lift door.
14 Adjust tension of torsion bar spring (Ref. 52-10-11, P. Block 501).

** ON FWD AND AFT PASSENGER/CREW DOORS

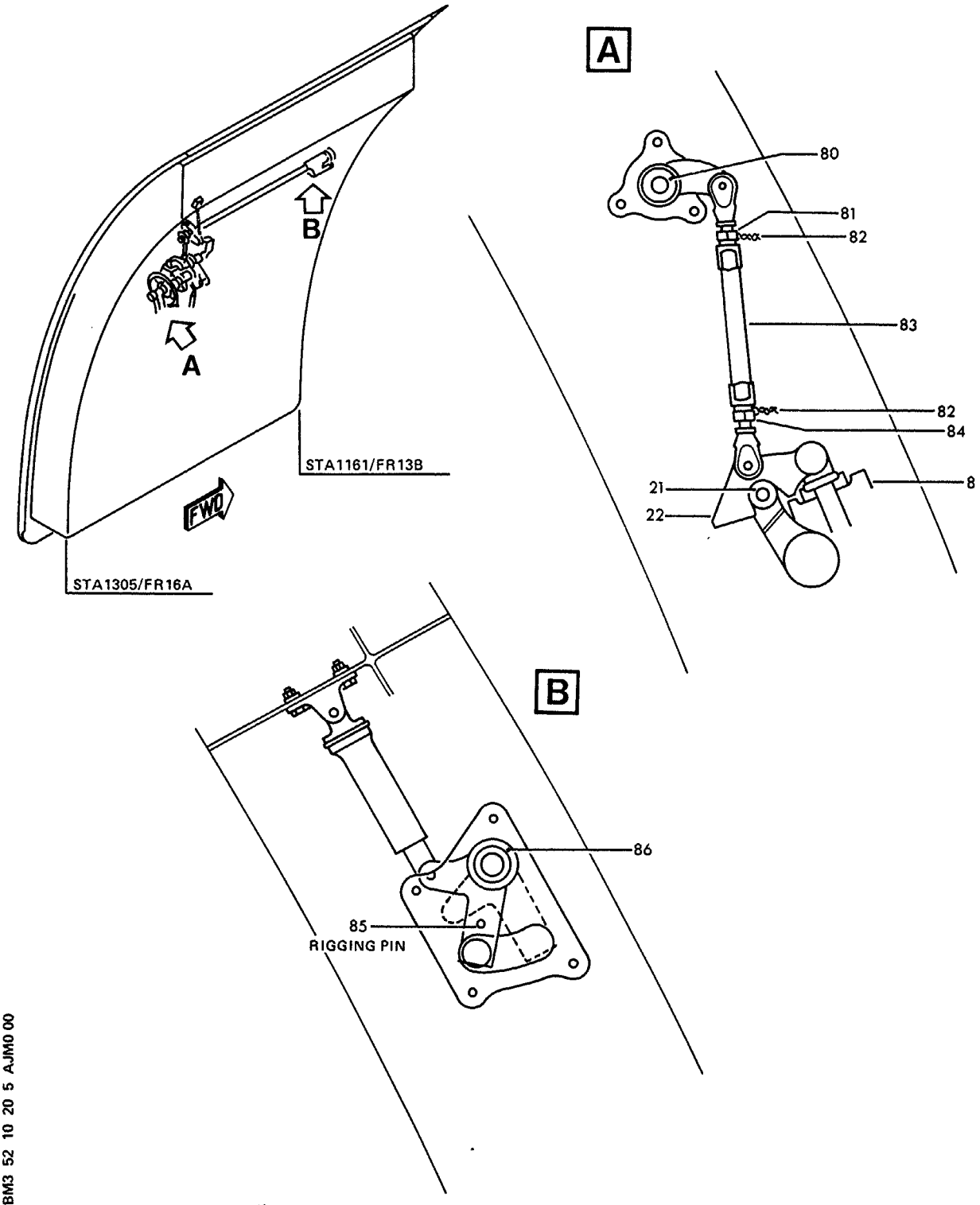
(4)Locking of Door Mechanism in High Position

** ON FWD PASSENGER/CREW DOORS

(Ref. Fig. 505)
(a)Open door.
(b)Check that roller (21) is fully engaged in hook (22).
(c)Insert rigging pin (85) at lowering shaft (86); if pin cannot be inserted, proceed as follows:
1 Cut and remove lockwire (82) and loosen nuts (81).
2 Adjust rod (83) until rigging pin (85) can be inserted.
NOTE : Roller (21) has to be fully engaged in hook (22).
(d)Remove rigging pin (85).
(e)Close door.
(f)Open door slowly and check engagement of roller (21) in hook (22) prior to roller of lifting shaft disengaging from roller fittings.
(g)If requirement per step (f) is not achieved, lengthen rod (83) (max. 1.5 turns) until requirement per step (f) is achieved.
(h)Tighten nuts (81) and secure with lockwire (82).

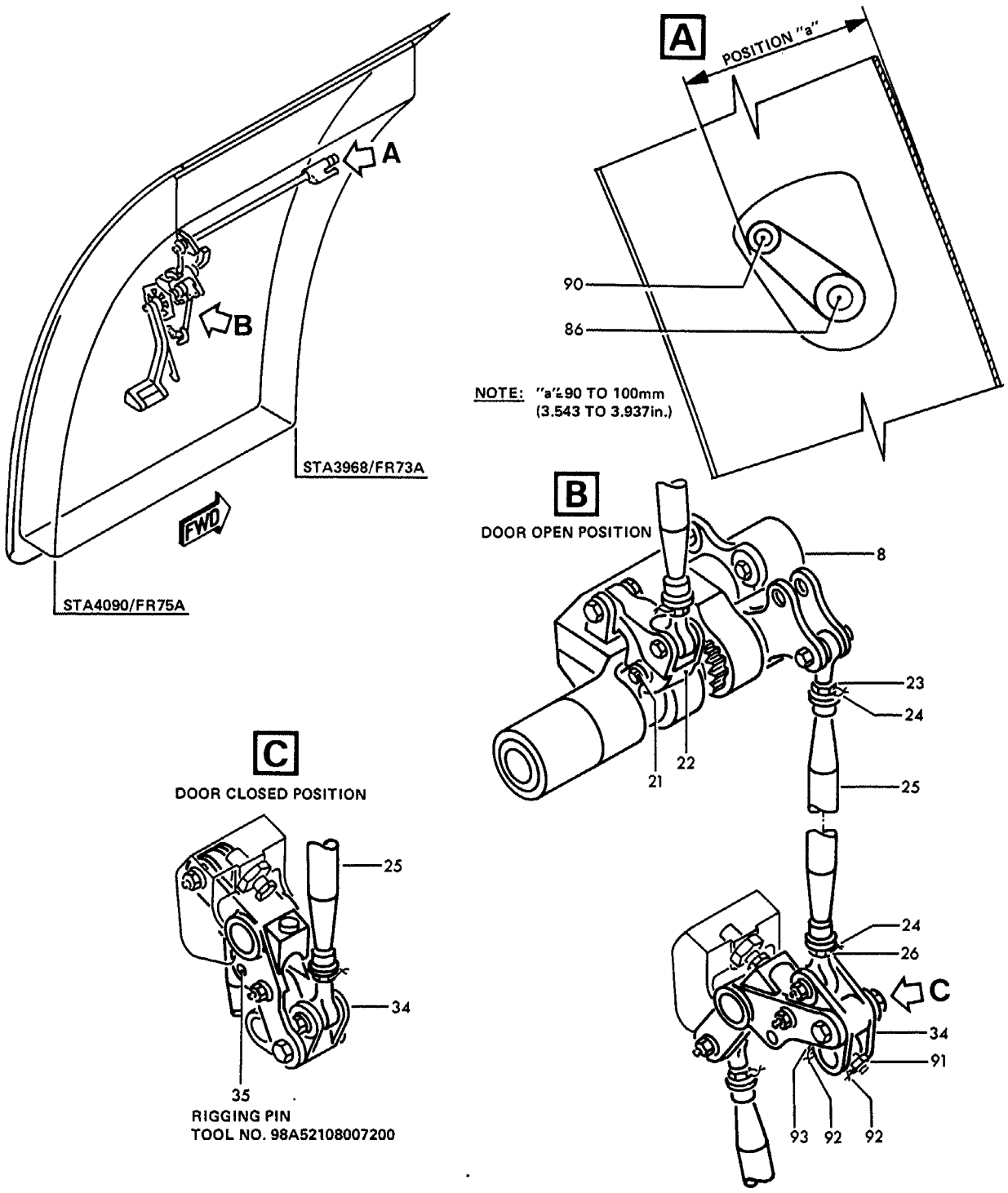
** ON AFT PASSENGER/CREW DOORS

(Ref. Fig. 506)
(i)Open door.
(j)Check that roller (90) of lowering shaft (86) is in position 'a'.
NOTE : Position "a" is 90 to 100 mm (3.543 to 3.937 in.) from edge of roller (90) to door skin.
(k)If roller (90) of lowering shaft (86) does not reach position 'a', proceed as follows:
1 Cut and remove lockwire (92) and loosen nut (91).
2 Adjust nut (93) so that roller (90) reaches position 'a'.
3 Tighten nut (91).
(l)Close door.
(m)Check that rigging pin (35) can be installed.



BM3 52 10 20 5 AJM0 00

FWD Passenger/Crew Doors -
Lowering Shaft, Locking Hook and Gear Box
Figure 505



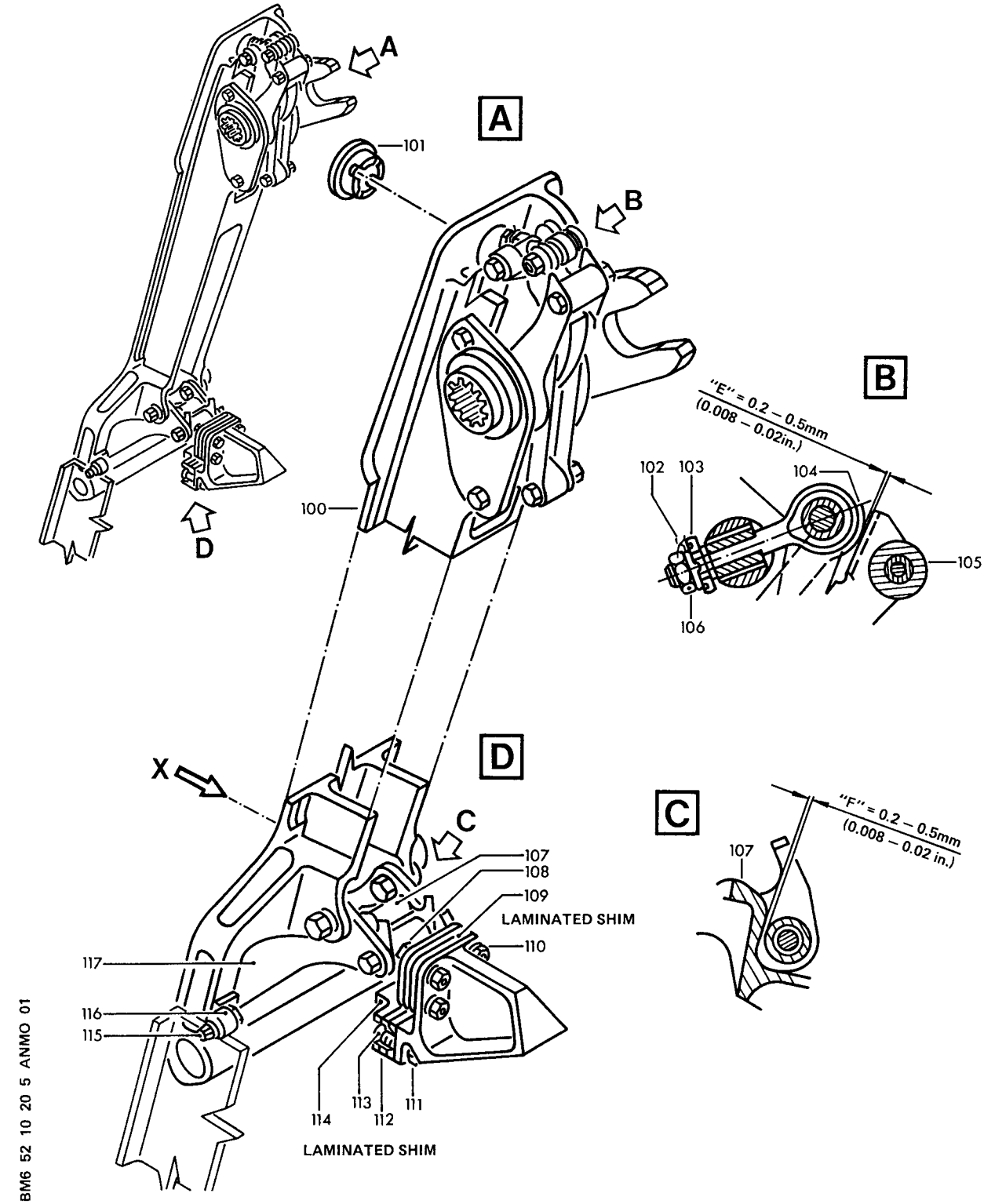
BM3 52 10 20 5 ALM0 00

AFT Passenger/Crew Doors -
Lowering Shaft, Gear Box and Twin Lever
Figure 506

(n)If rigging pin (35) cannot be installed, proceed as follows:
1 Cut and remove lockwire (24) and loosen nuts (23),(26) from rod (25) between gear box (8) and twin lever (34).
2 Adjust rod (25) until rigging pin (35) can be installed.
NOTE : For adjustment retract interior control handle until rod is unloaded.
3 Tighten nuts (23),(26) and remove rigging pin (35).
(o)Open door.
NOTE : Only for overhaul load interior control handle with 10 daN (22 lbf.) during door opening.
(p)Check that roller (90) of lowering shaft (86) is in position 'a'.
(q)If roller (90) of lowering shaft (86) does not reach position 'a', proceed per steps (k) thru (p).
(r)Install lockwire (24).
(s)If locking of door mechanism in high position is not obtained but roller (90) of lowering shaft (86) is in position 'a', proceed as follows:
1 Cut and remove lockwire (92) and loosen nut (93).
2 Adjust nut (91) until roller (21) contacts hook (22). Use mirror.
(t)Repeat steps (k) thru (o).
(u)If roller (21) does not contact hook (22), repeat steps (s) and (t).
(v)Repeat step (p).
(w)Install lockwire (92).

** ON FWD AND AFT PASSENGER/CREW DOORS

(5)Exterior Control Handle
(Ref. Fig. 507)
(a)Adjust gap 'F' as follows:
1 Close door by exterior control handle (100).
2 Make certain exterior control handle (100) is in locked position.
3 Pull and push exterior control handle (100) at point 'X' and measure exterior control handle travel. The travel must be 0.2 to 0.5 mm (0.008 to 0.02 in.). If measurement is out of tolerance, proceed as follows:
a Unlock exterior control handle (100).
b Adjust exterior control handle movement by loosening nut (115) and turning eccentric roller (116).
c Tighten nut (115) and repeat steps (a)2 and (a)3.
(b)Check that exterior control handle (100) is flush with outer contour of door ± 1.5 mm (0.06 in.). If exterior control handle (100) is out of tolerance, proceed as follows:
1 Measure and note exterior control handle (100) position relative to door contour.
2 Open exterior control handle (100).
3 Remove hook fitting (107) by removing screws (108) and nuts (110).
4 Change adjustment shims (109) as required.
5 Install hook fitting (107), adjustment shims (109), screws (108) and nuts (110) and tighten.
(c)Repeat steps (a) and (b) until both conditions are satisfied.



FWD and AFT Passenger/crew Doors
Exterior Control Handle
Figure 507

(d)Check operation of flap (117) as follows:
1 Open door by exterior control handle (100).
2 Check that flap (117) operates smoothly.
3 Make certain that flap (117) stays in open position.
4 Push exterior control handle (100) to closed position and check that flap (117) jumps to locked position. Flap (117) must be flush with contour of exterior control handle (100). If flap (117) is not in locked position, proceed as follows:

** ON FWD PASSENGER/CREW DOORS

a Remove upper parts of door lining (Ref. 27-10-13, P. Block 401).

** ON FWD AND AFT PASSENGER/CREW DOORS

b Remove nuts (111), screws (113), stop (114) and adjustment shims (112).
c Place additional adjustment shims (112) as required.
d Install adjustment shims (112), stop (114), screws (113) and nuts (111) and tighten. Repeat steps (d)1 thru (d)4.

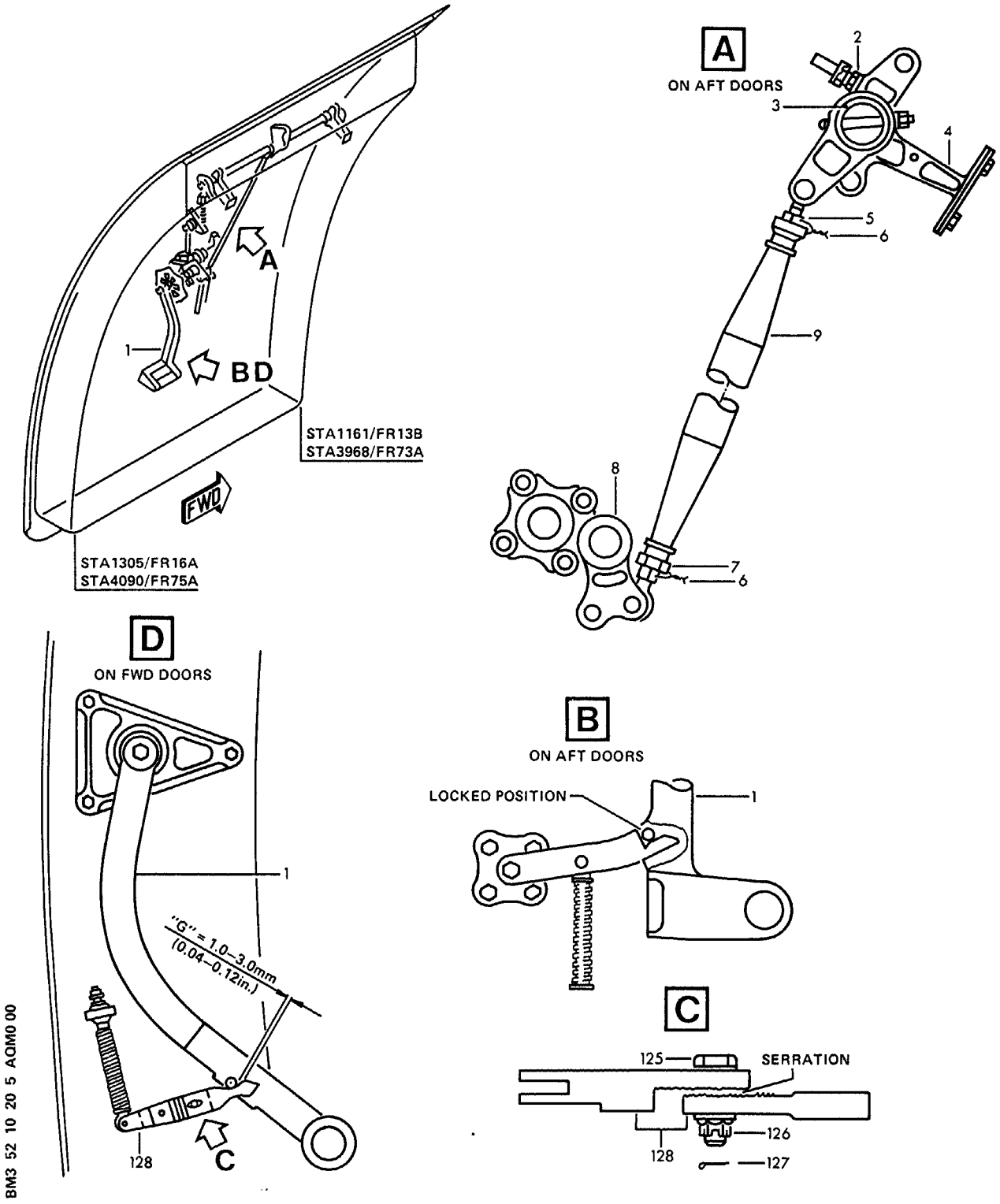
(e)Check gap 'E' and adjust if necessary as follows:
1 Remove plug (101).
2 Cut and remove lockwire (102).
3 Loosen nut (106).
4 Turn adjustment screw (103) to obtain gap 'E' between lever (104) and stop (105) and exterior control handle (100) contacts eccentric roller (116).
5 Tighten nut (106) and secure with lockwire (102).
6 Install plug (101).

(f)Close door by interior control handle when exterior control handle (100) is in up position and check that:
1 Flap (117) is flush with exterior control handle (100).
2 Exterior control handle (100) is flush with contour of door skin.

(6)Interior Control Handle
(Ref. Fig. 508)

** ON FWD PASSENGER/CREW DOORS

(a)Close door.
(b) Measure gap 'G'.
1 To measure gap 'G' proceed as follows:
a Install dial indicator with suitable supports to the door. structure.
b Position dial indicator actuating rod such that actuating rod contacts the handle. Zero dial indicator.
c Pull handle until hook starts moving.
d Read on dial indicator the movement of handle which corresponds with gap 'G'.
e If necessary, adjust as follows:
(c)Remove cotter pin (127).
(d)Loosen nut (126) from bolt (125) and adjust serrated cam (128) to



Interior Control Handle, Locking Shaft/
Gear Box Connection
Figure 508

obtain gap 'G'.
(e)Tighten nut (126) and secure with cotter pin (125).
(f)Remove dial indicator with supports.

** ON AFT PASSENGER/CREW DOORS

(e)Remove upper parts of door lining (Ref. 52-10-13, P. Block 401).
(f)Close door.
(g)Remove lockwire (6) and loosen nuts (5),(7).
(h)Adjust rod (9) between locking shaft (3) and gear box (8) so that crank lever (4) contacts stop (2) and interior control handle (1) is locked.
(i)Tighten nuts (5),(7) and secure with lockwire (6).

** ON FWD and AFT PASSENGER/CREW DOORS

C. Test
(1)Prepare door for test as follows:
(a)Remove ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(b)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(c)Apply corrosion-preventive compound (Material No. 05-005) thinly to all unpainted steel parts.
(d)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(e)Make certain that drain holes are clean and free from obstructions.
(f)Install door lining and insulation (Ref. 52-10-13, P. Block 401).
(g)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401).

ACTION	RESULT
1. Close door.	- No chafing of door lining - Smooth door closing - Door warning lights off.
2. Measure force required to operate interior control handle.	- Operating force must not exceed 16 daN (36 lbf.).

(2)Open door and lock in open position.
D. Close-Up
(1)Apply molycote (Material No. 04-017) to outer door handle mechanism (Ref. 12-22-52, P. Block 1).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(3)Close door.
(4)Remove access platform.

FWD, AFT DOOR LOCKING MECHANISM - INSPECTION/CHECK

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : Should crack formation be suspected during the following inspection/check an approved nondestructive test must be carried out.
If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
	B. 98A52108007001	Tool Set - R/I MID and AFT Passenger/Crew Doors
	C. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
	or 98A52108008001	Support Frame - Ballast Weight, Doors **NOTE** : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
	D.	Measuring Instruments
	E.	Magnifying Glass X10
R	F.	Dial Indicator
	G.	Torch
R	H.	Inspection Mirror
R	J.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.025 in.)
R	K.	Feeler Gages
R	L. Material No. 04-017	Common Greases (Ref. 20-31-00)
R	M. Material No. 05-005	Special Materials (Ref. 20-31-00)
R	N. Material No. 05-027	Special Materials (Ref. 20-31-00)
	Referenced Procedures	
	- 12-22-52, P. Block 1	Doors
	- 25-61-21, P. Block 401	Dual Escape Slide
	- 25-61-22, P. Block 401	Slide/Raft
	- 51-73-10, P. Block 801	Repair of Minor Damage
	- 51-74-10, P. Block 801	Removal of Corrosion
	- 51-75-10, P. Block 801	Repair of Paint Coatings
	- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
	- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
	- 52-10-20, P. Block 501	FWD, AFT Door Locking Mechanism
	- 52-71-11, P. Block 501	Door Warning Switches

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Open door.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(3)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(4)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
(5)Remove door lining and insulation (Ref. 52-10-13, P. Block 401).
(6)Install ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.

B. Inspection/Check
(1)Door Locking
(Ref. Fig. 601)
(a)Inspect locking mechanism for:
1 Corrosion (Ref. 51-74-10, P. Block 801.
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801).
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Security of attachment.
(b)Check operation as follows:
1 Close door.

** ON FWD PASSENGER/CREW DOORS

2 Lift door and insert 1.0 mm (0.04 in.) feeler gages between stop (2) and bellcrank (4) of locking shaft (3).

** ON AFT PASSENGER/CREW DOORS, SERIAL NOS 1162 - 1413

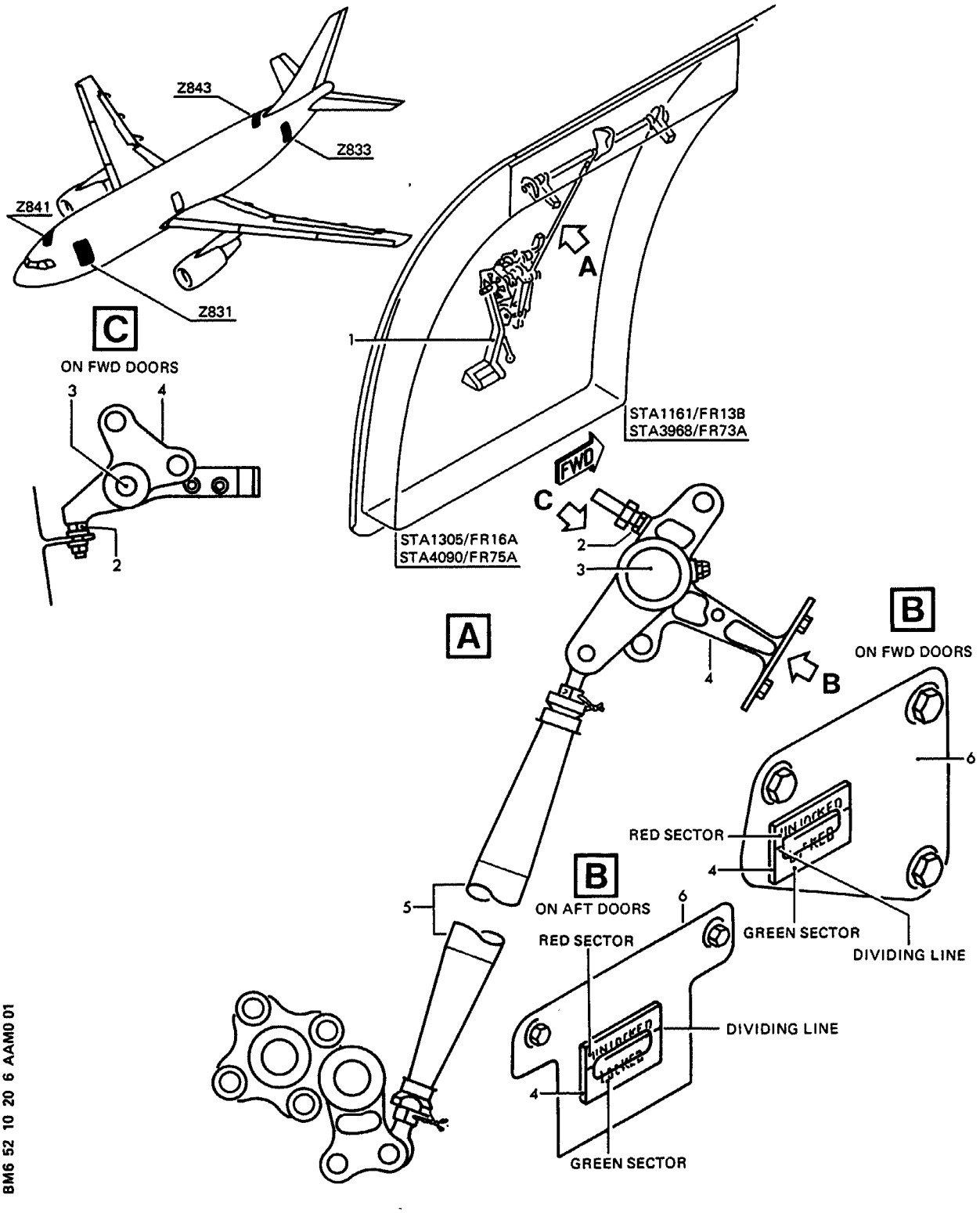
2 Lift door and insert 0.6 mm (0.02 in.) feeler gages between stop (2) and bellcrank (4) of locking shaft (3).

** ON AFT PASSENGER/CREW DOORS, SERIAL NOS 1415 AND SUBSEQUENT

2 Lift door and insert 0.9 mm (0.035 in.) feeler gages between stop (2) and bellcrank (4) of locking shaft (3).

** ON FWD AND AFT PASSENGER/CREW DOORS

3 Lower door.
4 Check that line dividing red and green sectors of bellcrank (4) is aligned with upper edge of indicator window (6) (Ref. 52-10-20, P. Block 501).
5 Lift door and remove feeler gages.
6 Check indication of door warning system (Ref. 52-71-11, P. Block 501).



FWD, AFT Passenger/Crew Doors -
Door Locking
Figure 601

R

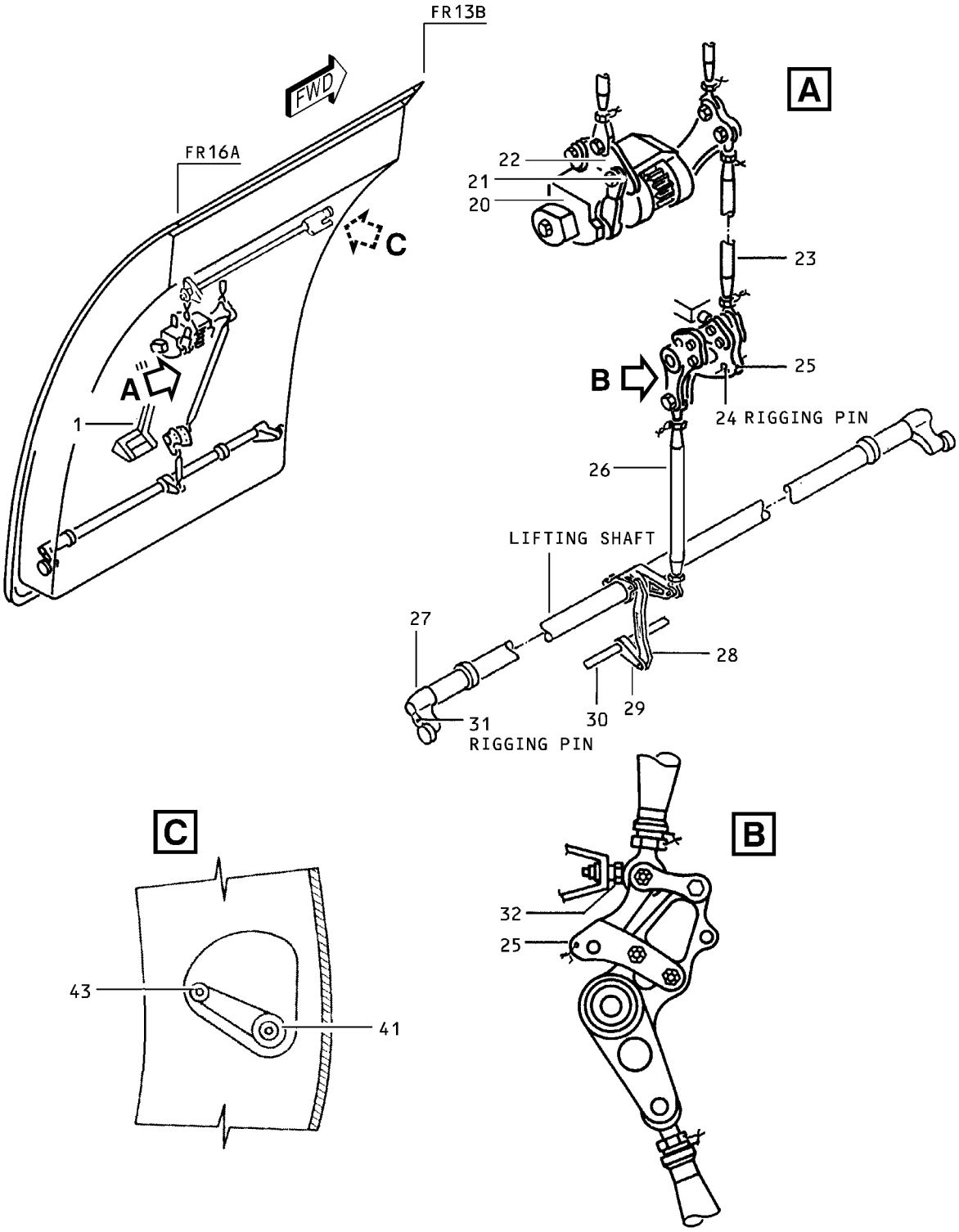
(2)Door Closed Position
(Ref. Fig. 602)
(Ref. Fig. 603)
(Ref. Fig. 604)
(a)Inspect interior control handle (1), gear box (20), rod (23), twin
R lever (25), rod (26), lifting arm (27), rod assy (28), bellcrank
R (29) and torsion bar spring (30) for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801).
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Security of attachment.
(b)Check operation as follows:

**** ON FWD PASSENGER/CREW DOORS**

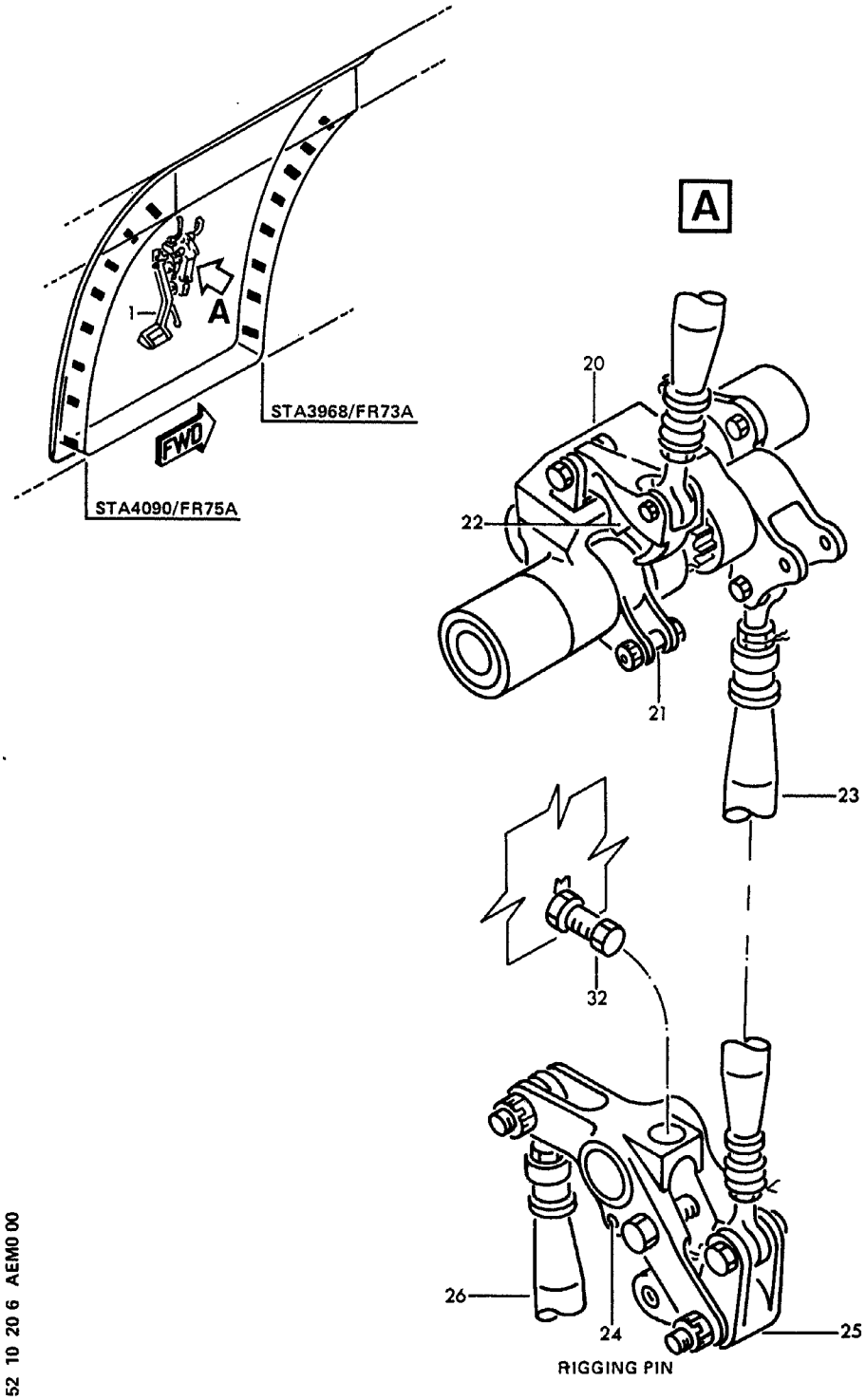
1 Open door.
2 Check that hook (22) of door locking mechanism in high position is fully engaged on roller (21) (Ref. 52-10-20, P. Block 501).
R 3 Make sure that door is open approximately 40 cm (15.75 in.)
R (measured from door sill).
R 4 Move roller lever of lowering shaft (41) outboard to release the
R locking mechanism (Ref. Fig.) and hold it until the door is
R lowered.
R 5 Carefully move the interior door handle (1) down to lower the door.
R 6 Check that rigging pin (31) can be inserted from the outer aft side
R through the lifting arm (27).
R 7 Check that the interior door handle (1) stays in the locked position.

**** ON AFT PASSENGER/CREW DOORS**

1 Close door.
2 Check that rigging pin (31) can be inserted and interior control handle (1) stays in locked position.
3 Open door and insert rigging pin (31).
4 Check that twin lever (25) contacts stop (32), gap "C" is between 4.0 and 8.0 mm (0.16 and 0.32 in.) and stop (33) just contacts bellcrank (29) (Ref. 52-10-20, P. Block 501).

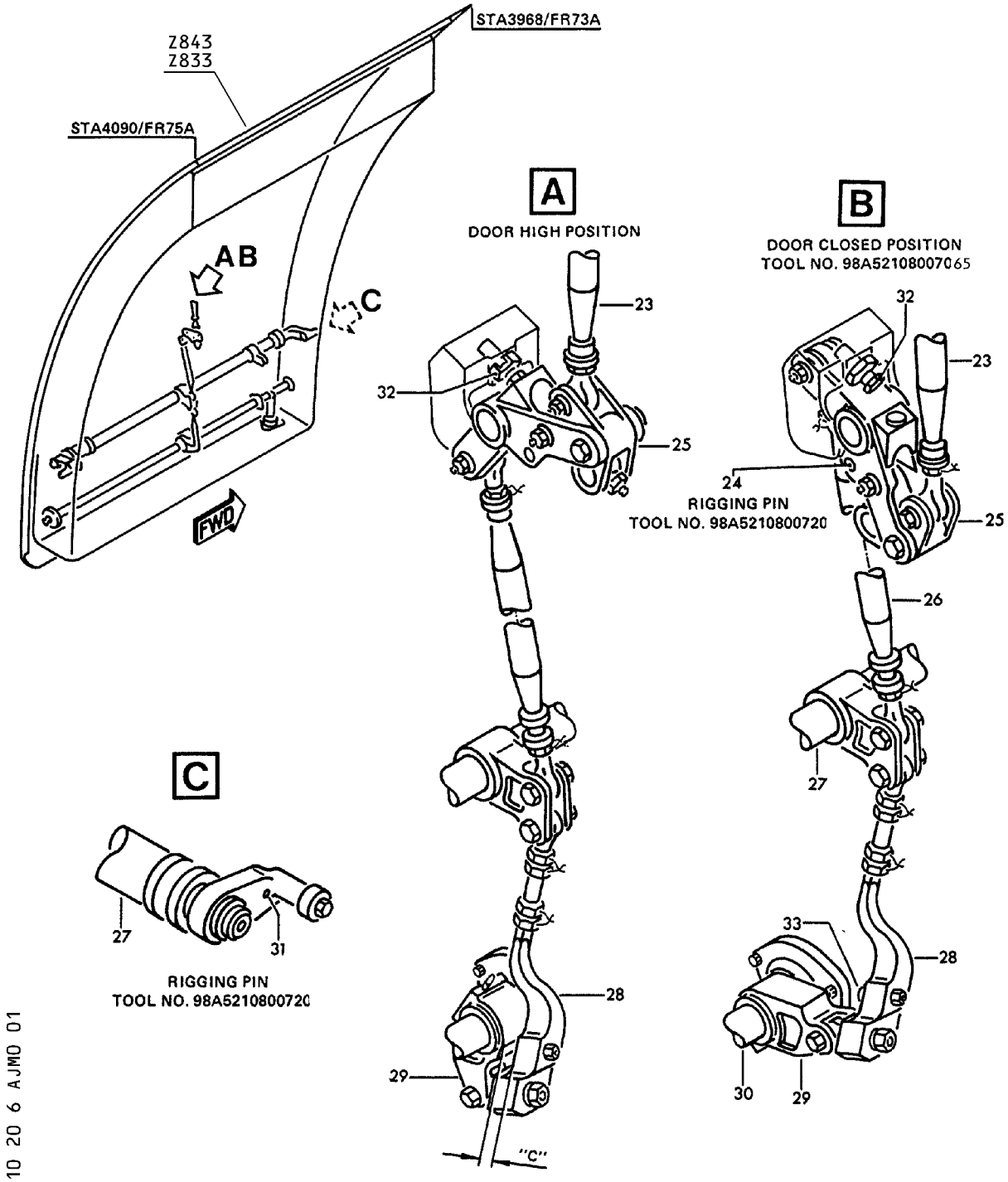


FWD Passenger/Crew Door - Position Check
Figure 602



BM3 52 10 20 6 AEM0 00

AFT Passenger/Crew Door - Position Check - Gear Box
Figure 603



BM6 52 10 20 6 AJM0 01

AFT Passenger/Crew Door - Position Check -
Torsion Bar Spring Rod
Figure 604

R

** ON FWD AND AFT PASSENGER/CREW DOORS

3 Door High Position (Ref. Fig. 602, 603, 604)

(a)Inspect interior control handle (1), gear box (20), rod (23), twin
R lever (25), rod (26), lifting arm (27), rod assy (28) and torsion bar spring (30) for:

1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801).
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Security of attachment.

(b)Check operation as follows:

** ON FWD PASSENGER/CREW DOORS

1 Open door.
2 Check that hook (22) of door locking mechanism in high position is fully engaged on roller (21).
3 Check that rigging pin (24) can be inserted in twin lever (25).
R 4 Check that rigging pin (31) can be inserted in lifting arm (27).
5 Check that twin lever (25) contacts stop (32) (Ref. 52-10-20, P. Block 501).

** ON AFT PASSENGER/CREW DOORS

1 Open door.
R 2 Check that rigging pin (31) can be inserted in lifting arm (27).
3 Check that twin lever (25) contacts stop (32).
4 Check that gap "C" between rod assy (28) and bellcrank (29) of torque shaft (30) is between 4.0 and 8.0 mm (0.16 and 0.32 in.) and stop (33) just contacts bellcrank (29) (Ref. 52-10-20, P. Block 501).

** ON FWD AND AFT PASSENGER/CREW DOORS

(4)Locking of Door Mechanism in High Position
(Ref. Fig. 605)
(a)Inspect roller (21), hook (22), rod (23), twin lever (25), spring (40) lowering shaft (41) and rod (42) for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801).
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Security of attachment.
(b)Check operation as follows:
1 Place door in "high closed" position.

** ON FWD PASSENGER/CREW DOORS

2 Load interior control handle (1) with 7 daN (15 lb.) in upwards direction and open door slowly.

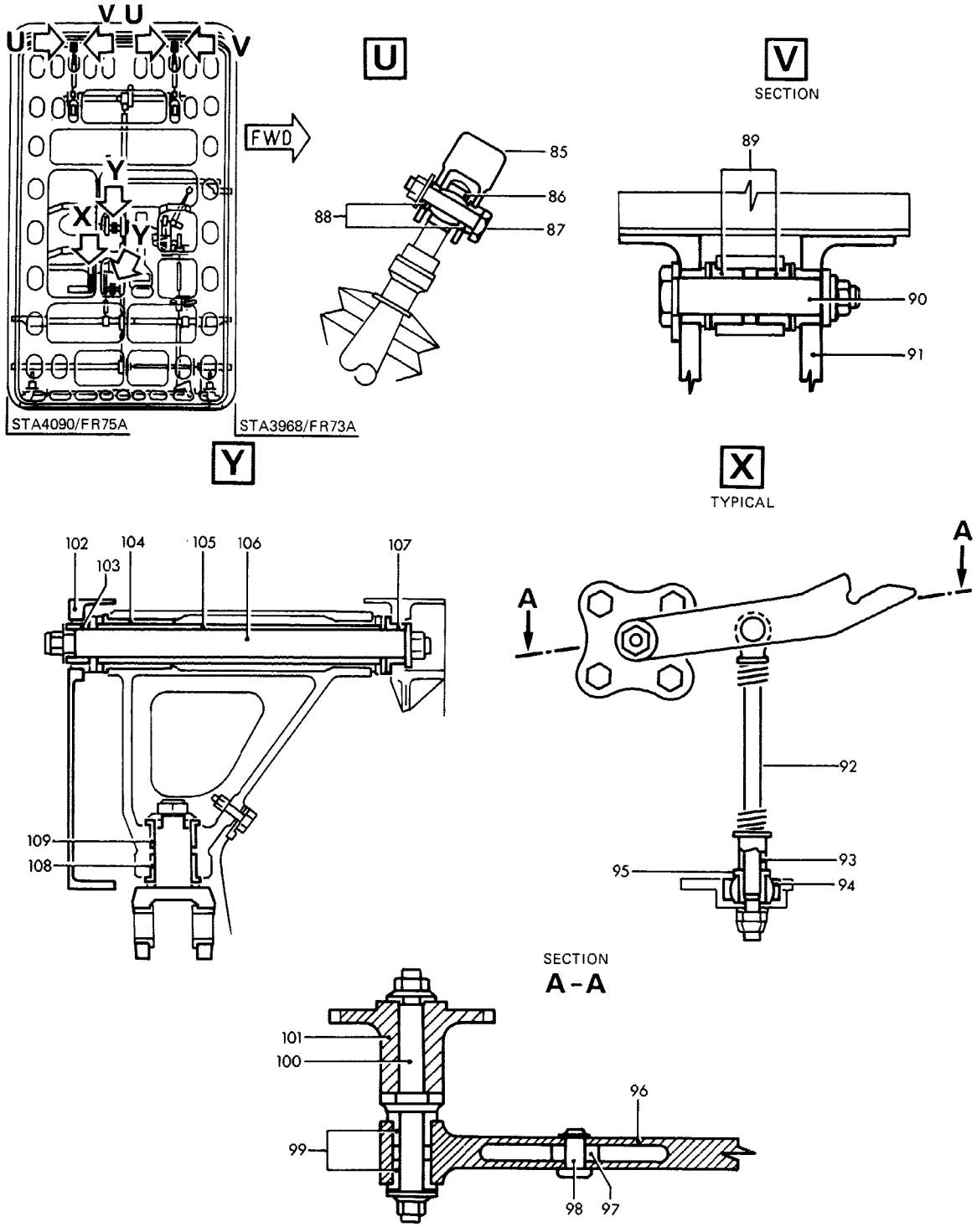
** ON AFT PASSENGER/CREW DOORS

2 Load interior control handle (1) with 10 daN (22 lb.) in upwards direction and open door slowly.

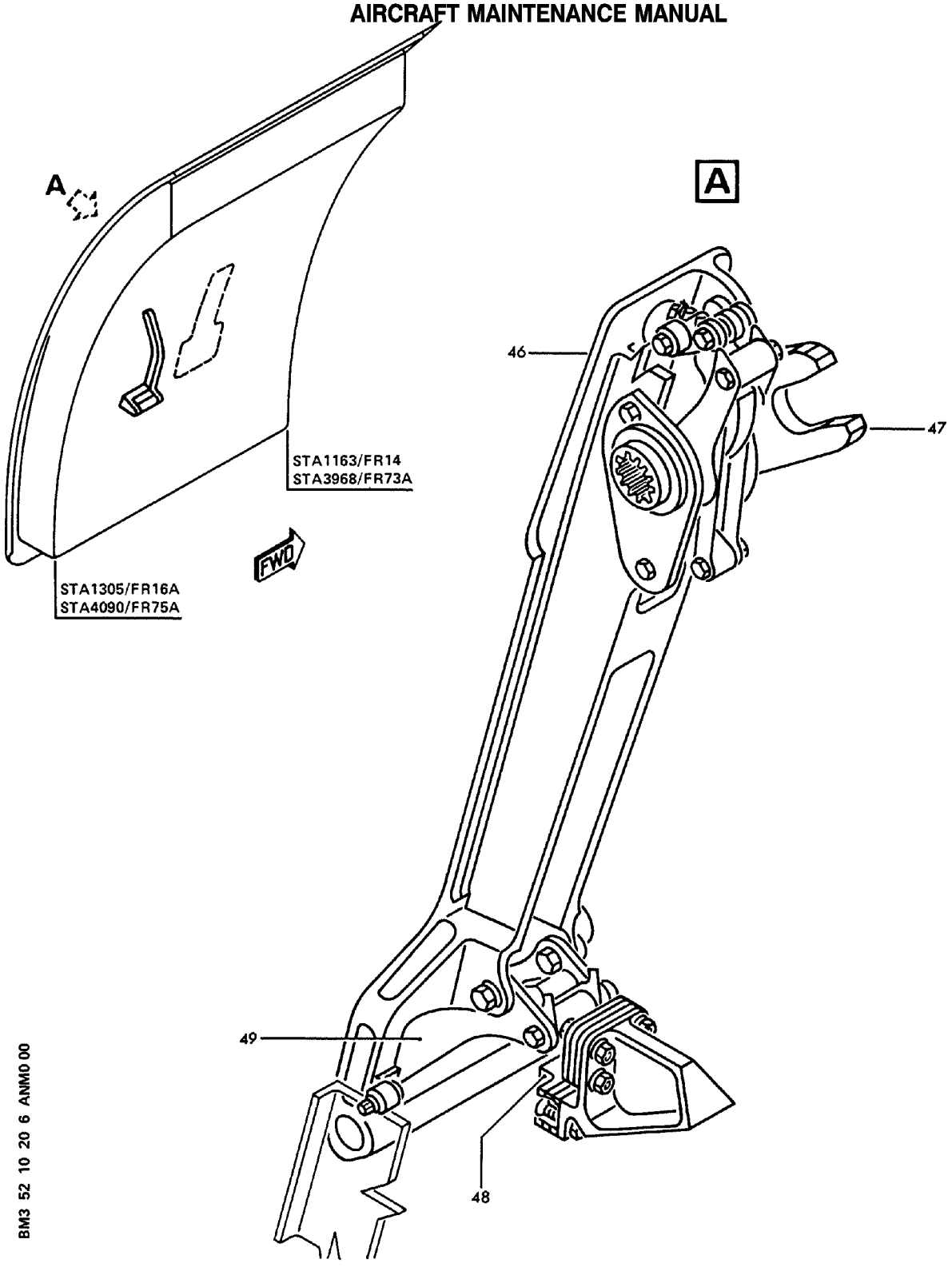
** ON FWD AND AFT PASSENGER/CREW DOORS

3 Check that twin lever (25) contacts stop (32).
4 Check that roller (43) of lowering shaft (41) is in position "a".
5 Check that interior control handle (1) is locked.
6 Place door in "high closed" position.
7 Load interior control handle (1) with 10 daN (22 lb.) in downwards direction and open door slowly.
8 Check that roller (43) of lowering shaft (41) is in position "a".
9 Check that interior control handle (1) is locked (Ref. 52-10-20, P. Block 501).

(5)Exterior Control Handle
(Ref. Fig. 606)
(a)Inspect exterior control handle (46), cam (47), stop (48) and flap (49) for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801).
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Security of attachment.
(b)Check operation as follows:
1 Open and then close door with exterior control handle (46).
2 Check that exterior control handle (46) is closed and flap (49) is flush with contour of exterior control handle (46).
3 Check that interior control handle (1) is in locked position.
4 Open door with interior control handle (1).
5 Fully open exterior control handle (46).
6 Check automatic locking of exterior control handle (46).
7 Close and then open door with exterior control handle (46).



FWD and AFT Passenger/Crew Doors -
Locking of Door Mechanism in High Position
Figure 605



FWD and AFT Passenger/Crew Doors -
Exterior Control Handle
Figure 606

8 Close door with interior control handle (1).

9 Check that exterior control handle (46) is closed and flap (49) is flush with contour of exterior handle (46).
10 With door closed (Ref. 52-10-00, P. Block 301), proceed as follows:
a Remove safety pin for emergency control handle.
b Set emergency control handle to 'ARMED' (fully forward) position.
c Open door with exterior control handle (46).
d Check that emergency control handle is in 'DISARMED' (fully aft) position.
e Insert safety pin for emergency control handle (For Adjustment Ref. 52-10-20, P. Block 501).

(6)Interior Control Handle
(Ref. Fig. 607)
(a)Inspect interior control handle (1), stops (2), bellcranks (4), rod (5) and locking mechanism (55) for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801).
3 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
4 Security of attachment.
(b)Check operation as follows:

** ON FWD PASSENGER/CREW DOORS

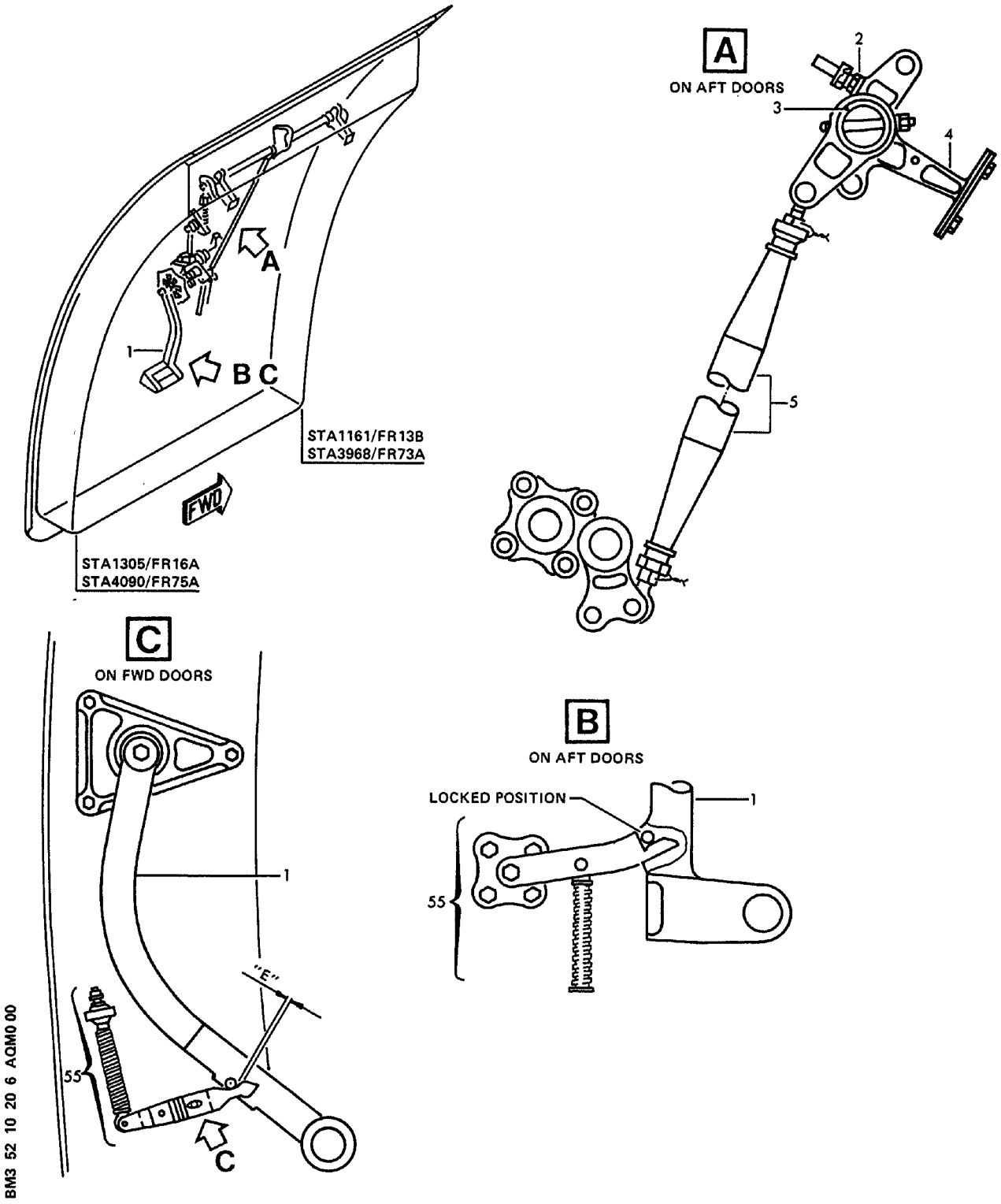
1 Close door.
2 Check that interior control handle (1) is in locked position.
3 Check gap "E" is between 1.0 and 3.0 mm (0.04 and 0.12 in.).
R 4 To check gap "E" proceed as follows:
R a Install dial indicator with suitable supports to the door.
R structure.
R b Position dial indicator actuating rod such that actuating rod
R contacts the handle. Zero dial indicator.
R c Pull handle until hook starts moving.
R d Read on dial indicator the movement of handle
R which corresponds with gap "E".

** ON AFT PASSENGER/CREW DOORS

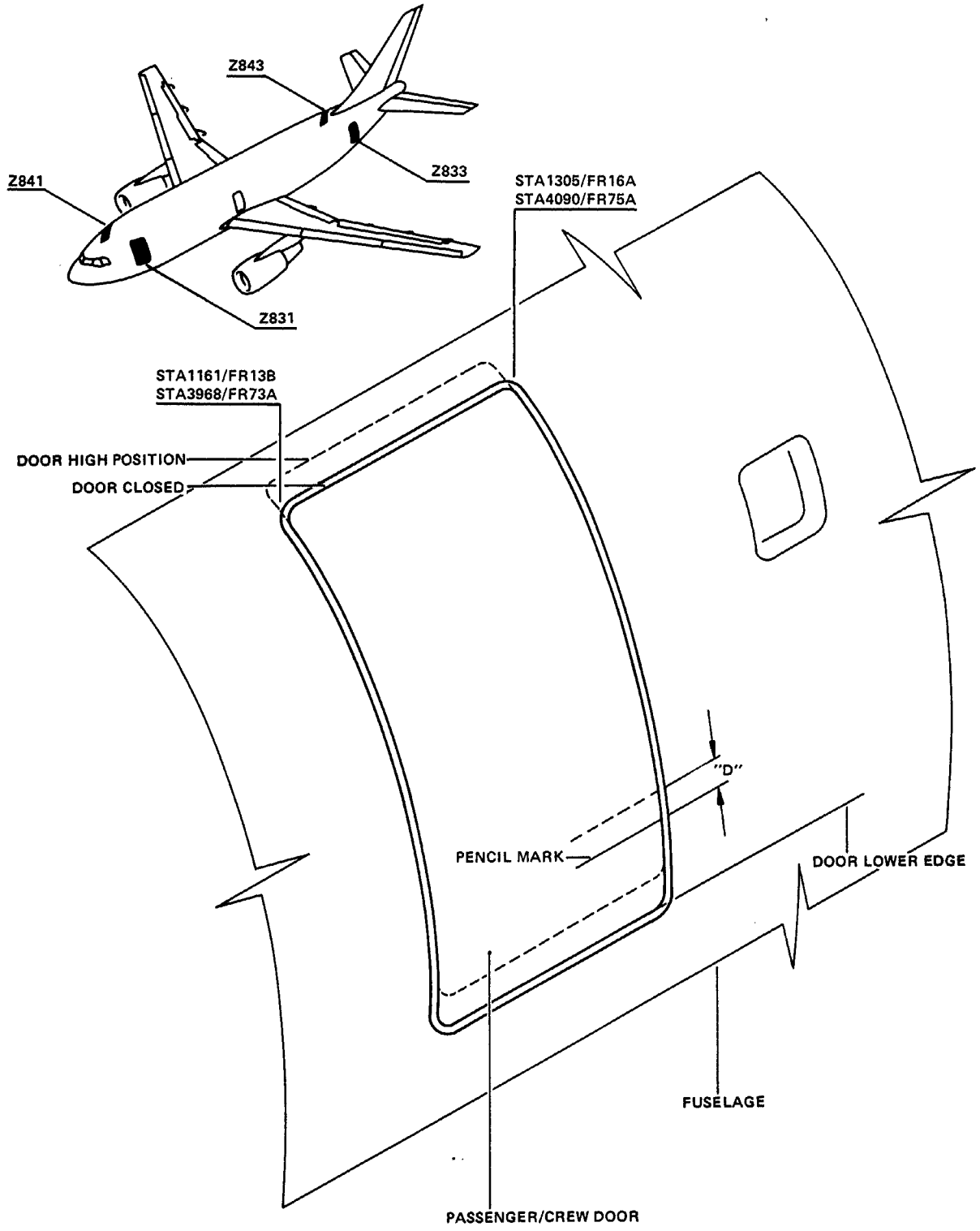
1 Close door.
2 Check that interior control handle (1) is in locked position and bellcranks (4) contact stops (2).

** ON FWD AND AFT PASSENGER/CREW DOORS

(For Adjustment Ref. 52-10-20, P. Block 501).
(7)Check adjustment of locking mechanism by movement of door from door closed position to high position.
(Ref. Fig. 608)
(a)Close door.
(b)Using a soft pencil, make a horizontal line approx. 180 mm (7 in.) from lower edge of door at door and adjacent fuselage.
(c)Raise interior control handle to fully open position.



FWD and AFT Passenger/Crew Doors -
Interior Control Handle Locked Position
Figure 607



Locking Mechanism Adjustment Check
Figure 608

(d)Measure distance "D" between pencil marks on door and fuselage.

NOTE : Distance "D" must be
R - on FWD door: 47±2 mm (1.85±0.079 in.),
R - on AFT door: 50±2 mm (1.97±0.079 in.).

(e)If distance "D" is out of limits, check adjustment of door locking mechanism (Ref. 52-10-20, P. Block 501).

(8)Measurement of Fits and Clearances. Refer to table following this topic.
NOTE : 1) in any column denotes bearings or PTFE-bushes.

C. Close-Up

(1)Remove ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(2)Make certain that work area is clean and clear of tools and other items of equipment.
(3)Apply corrosion-preventive compound (Material No. 05-005) thinly to all unpainted steel parts.
(4)Apply molycote (Material No. 04-017) to outer door handle mechanism (Ref. 12-22-52, P. Block 1).
(5)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(6)Make certain that drain holes are clean and free from obstructions.
(7)Install door lining and insulation (Ref. 52-10-13, P. Block 401).
(8)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).

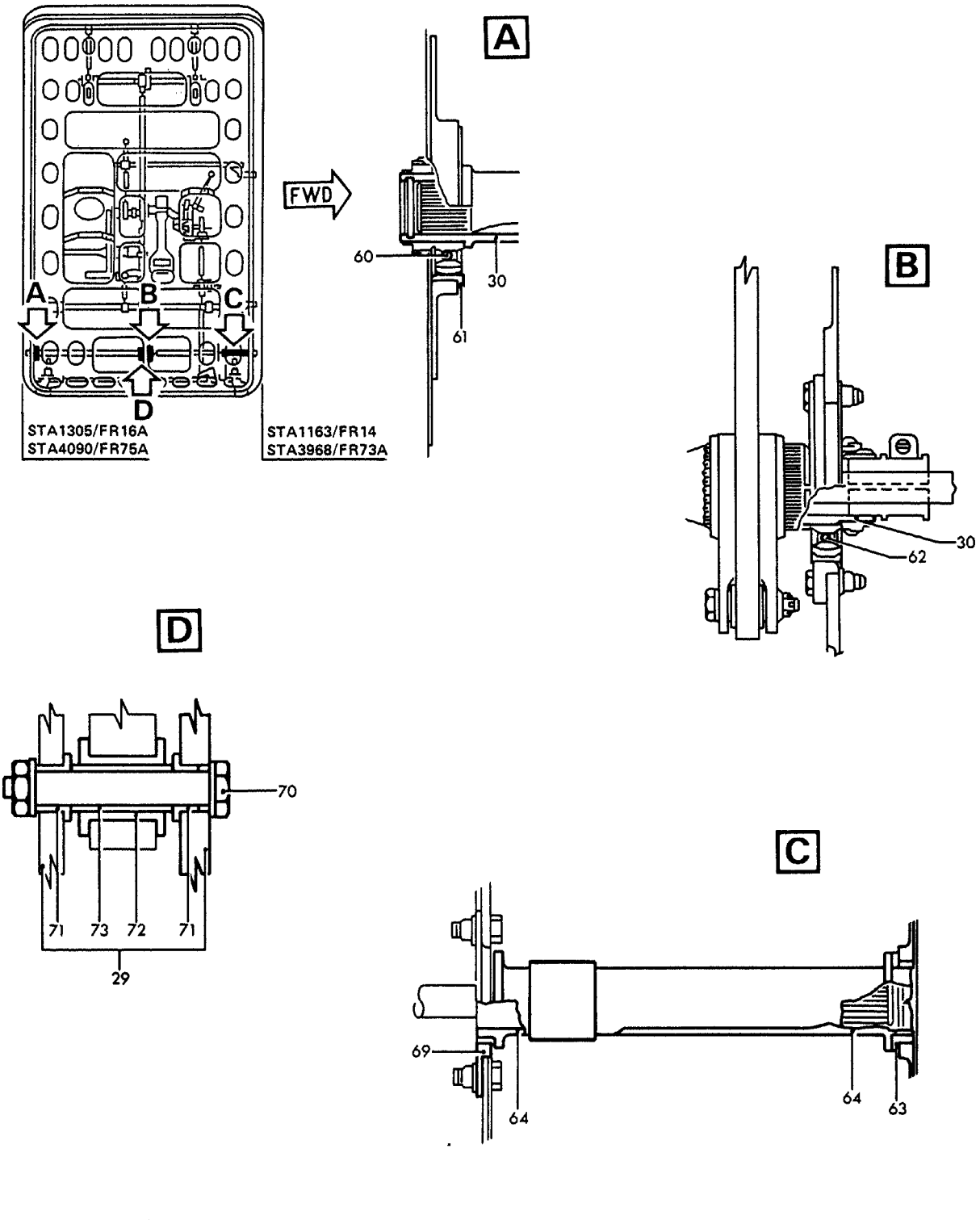
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(9)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(10)Close door.
(11)Remove access platform.

Fits and Clearances
(Ref. Fig. 609)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A OD 30	25.375 (0.9990)	25.387 (0.9995)			25.375 (0.9990)		1)
			-0.012 -(0.0005)	0.025 (0.0010)			
A ID 60	25.375 (0.9990)	25.400 (1.0000)				1)	
A OD 60	49.187 (1.9364)	49.212 (1.9375)			1)		
			0.000 (0.0000)	0.050 (0.0020)			1)
A ID 61	49.212 (1.9375)	49.237 (1.9385)				49.274 (1.9399)	
B OD 30	25.375 (0.9990)	25.387 (0.9995)			25.375 (0.9990)		
			-0.012 -(0.0005)	0.025 (0.0010)			1)
B ID 62	25.375 (0.9990)	25.400 (1.0000)				1)	
C OD 64	25.402 (1.0001)	25.423 (1.0009)			25.371 (0.9989)		
			0.002 (0.0001)	0.054 (0.0021)			1)
C ID 69	25.425 (1.0010)	25.456 (1.0022)				1)	
C OD 64	25.402 (1.0001)	25.423 (1.0009)			25.371 (0.9989)		
			0.002 (0.0001)	0.054 (0.0021)			1)
C ID 63	25.425 (1.0010)	25.456 (1.0022)				1)	

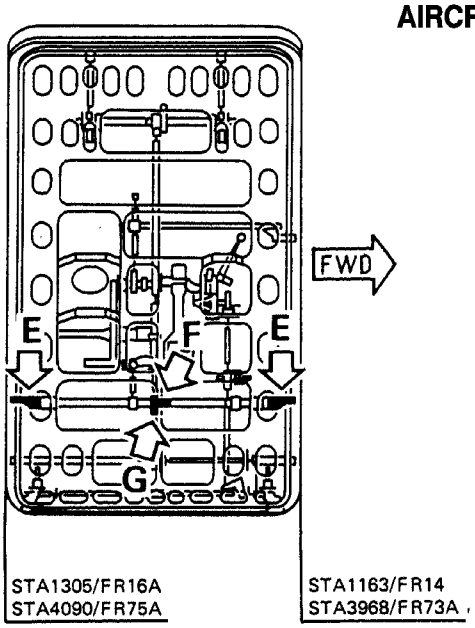


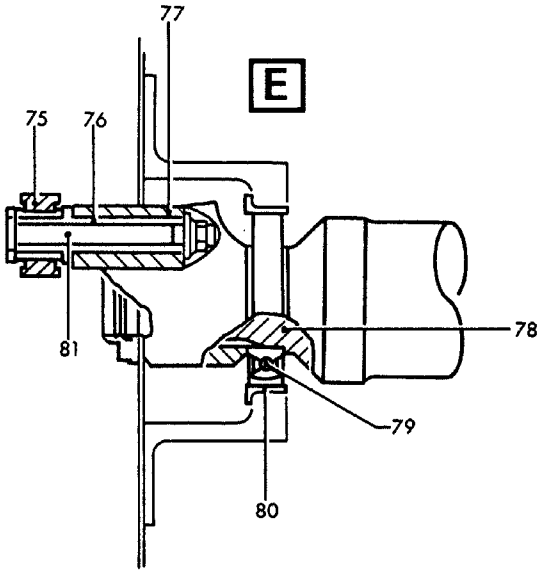
Torsion Bar Spring and Torque Shaft
Figure 609

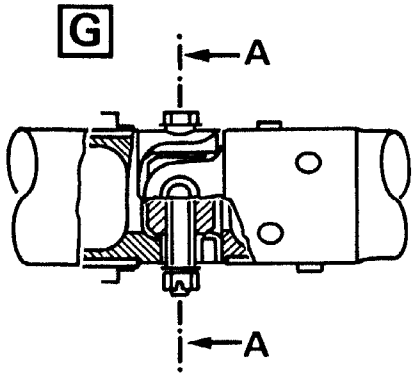
Fits and Clearances
(Ref. Fig. 609)
(Ref. Fig. 610)

** ON FWD AND AFT PASSENGER/CREW DOORS

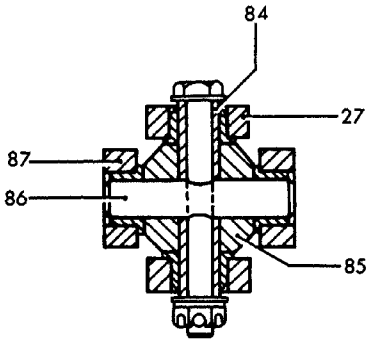
Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm Max.	In-Service Wear Limits: Max. Allow. clear mm(in.)
D OD 70	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.013 (0.0005)	0.041 (0.0016)			0.080 (0.0031)
D ID 73	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
D OD 73	9.510 (0.3744)	9.525 (0.3750)			9.505 (0.3742)		
			0.015 (0.0006)	0.053 (0.0021)			1)
D ID 72	9.540 (0.3756)	9.563 (0.3765)				1)	
D OD 70	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
D ID 71	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
D OD 71	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
D ID 29	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
** ON AFT PASSENGER/CREW DOORS							
E OD 78	25.380 (0.9992)	25.393 (0.9997)			25.360 (0.9984)		
			-0.018 -(0.0007)	0.020 (0.0008)			1)
E ID 79	25.375 (0.9990)	25.400 (1.0000)				1)	

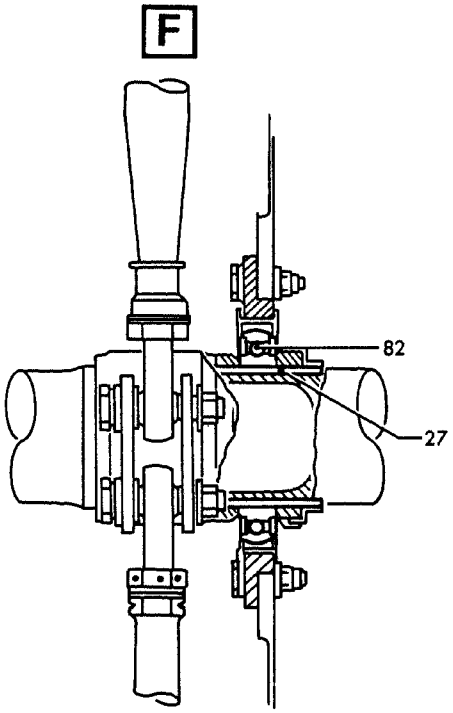






SECTION
A-A





BM3 52 10 20 6 AWM0 00

Lifting Shaft
Figure 610

Fits and Clearances (Ref. Fig. 610)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
E OD 79	49.187 (1.9365)	49.212 (1.9375)			1)		
			0.000 (0.0000)	0.050 (0.0020)			1)
E ID 80	49.212 (1.9375)	49.237 (1.9385)				49.274 (1.9399)	
E OD 81	6.319 (0.2488)	6.340 (0.2496)			6.285 (0.2474)		
			0.002 (0.0001)	0.046 (0.0018)			0.118 (0.0046)
E ID 76	6.342 (0.2497)	6.365 (0.2506)				6.403 (0.2521)	
E OD 76	9.497 (0.3739)	9.512 (0.3748)			9.476 (0.3731)		
			0.009 (0.0004)	0.033 (0.0013)			0.067 (0.0026)
E ID 77	9.521 (0.3748)	9.530 (0.3752)				9.543 (0.3757)	
E OD 76	9.511 (0.3744)	9.520 (0.3748)			9.505 (0.3742)		
			0.020 (0.0008)	0.052 (0.0020)			1)
E ID 75	9.540 (0.3756)	9.563 (0.3765)				1)	
F OD 27	39.675 (1.5620)	39.687 (1.5625)			39.659 (1.5614)		
			-0.012 -(0.0005)	0.025 (0.0010)			1)
F ID 82	39.675 (1.5620)	39.700 (1.5630)				1)	

Fits and Clearances (Ref. Fig. 610)

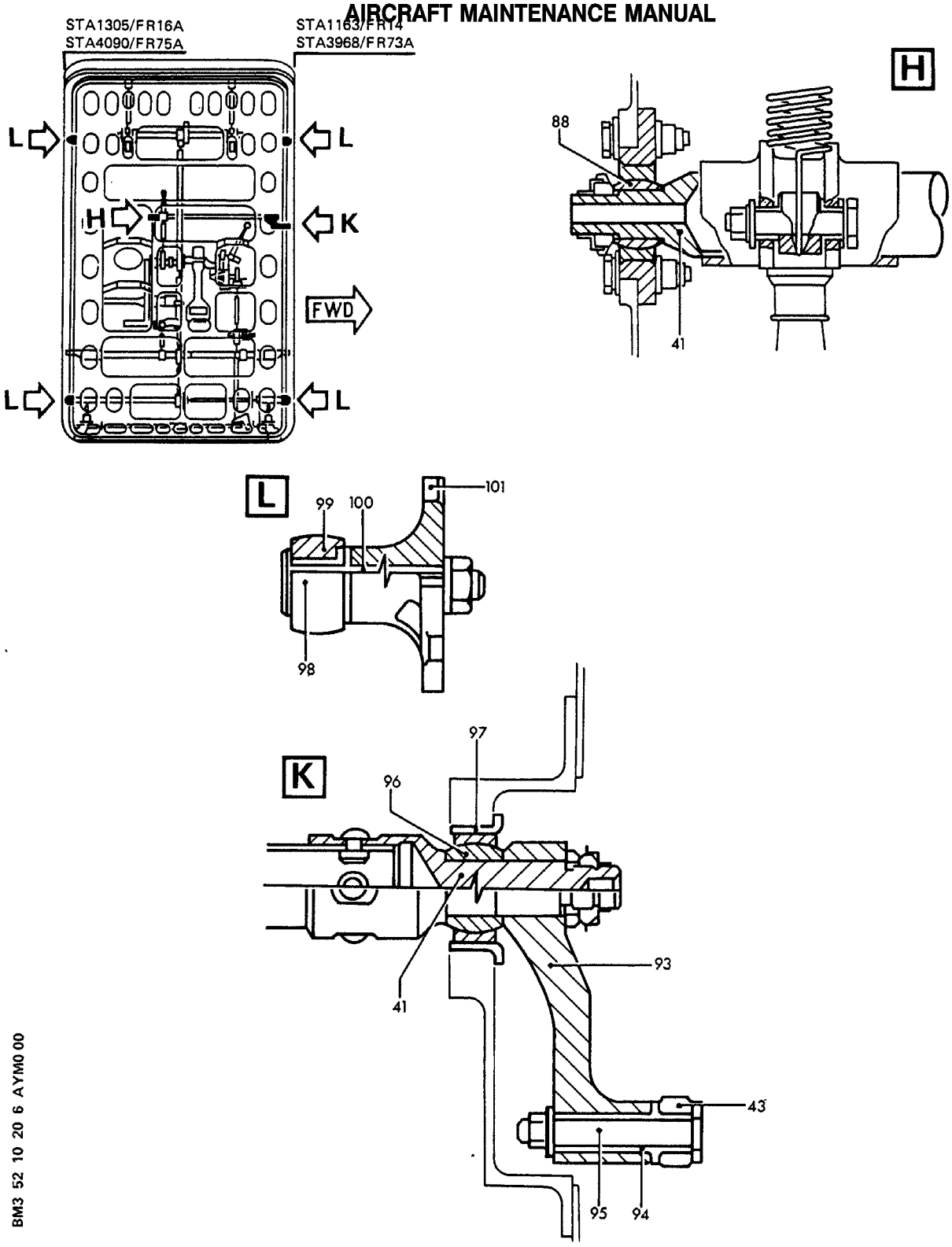
** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
G, A-A OD 86	8.486 (0.3341)	8.495 (0.3345)			8.480 (0.3339)		
			0.001 (0.00004)	0.019 (0.0007)			0.038 (0.0015)
G, A-A ID 87	8.496 (0.3345)	8.505 (0.3348)				8.518 (0.3354)	
G, A-A OD 86	8.486 (0.3341)	8.495 (0.3344)			8.480 (0.3339)		
			0.001 (0.00004)	0.019 (0.0007)			0.038 (0.0015)
G, A-A ID 85	8.496 (0.3345)	8.505 (0.3348)				8.518 (0.3354)	
G, A-A OD 85	21.959 (0.8645)	21.980 (0.8654)			21.928 (0.8633)		
			0.015 (0.0006)	0.049 (0.0019)			0.100 (0.0039)
G, A-A ID 27	21.995 (0.8659)	22.008 (0.8665)				22.028 (0.8672)	
G, A-A OD 84	8.486 (0.3341)	8.495 (0.3344)			8.480 (0.3339)		
			0.001 (0.00004)	0.019 (0.0007)			0.038 (0.0015)
G, A-A ID 27	8.496 (0.3345)	8.505 (0.3348)				8.518 (0.3354)	
G, A-A OD 85	21.959 (0.8645)	21.980 (0.8654)			21.928 (0.8633)		
			0.015 (0.0006)	0.049 (0.0019)			0.100 (0.0039)
G, A-A ID 87	21.995 (0.8659)	22.008 (0.8665)				22.028 (0.8672)	

Fit and Clearances
(Ref. Fig. 611)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
H OD 41	12.675 (0.4990)	12.687 (0.4995)			12.658 (0.4983)		1)
			0.000 (0.0000)	0.025 (0.0010)			
H ID 88	12.687 (0.4995)	12.700 (0.5000)				1)	
K OD 41	14.263 (0.5615)	14.275 (0.5620)			14.247 (0.5609)		
			0.000 (0.0000)	0.025 (0.0010)			1)
K ID 96	14.275 (0.5620)	14.288 (0.5625)				1)	
K OD 96	27.767 (1.0932)	27.780 (1.0937)			1)		
			0.000 (0.0000)	0.026 (0.0010)			1)
K ID 97	27.780 (1.0937)	27.793 (1.0942)				27.813 (1.0950)	
K OD 95	6.319 (0.2488)	6.340 (0.2496)			6.285 (0.2474)		
			0.002 (0.0001)	0.046 (0.0018)			0.118 (0.0046)
K ID 94	6.342 (0.2497)	6.365 (0.2506)				6.403 (0.2521)	
K OD 94	9.511 (0.3744)	9.520 (0.3748)			9.505 (0.3742)		
			0.005 (0.0002)	0.029 (0.0011)			0.056 (0.0022)
K ID 43	9.525 (0.3750)	9.540 (0.3756)				9.561 (0.3764)	

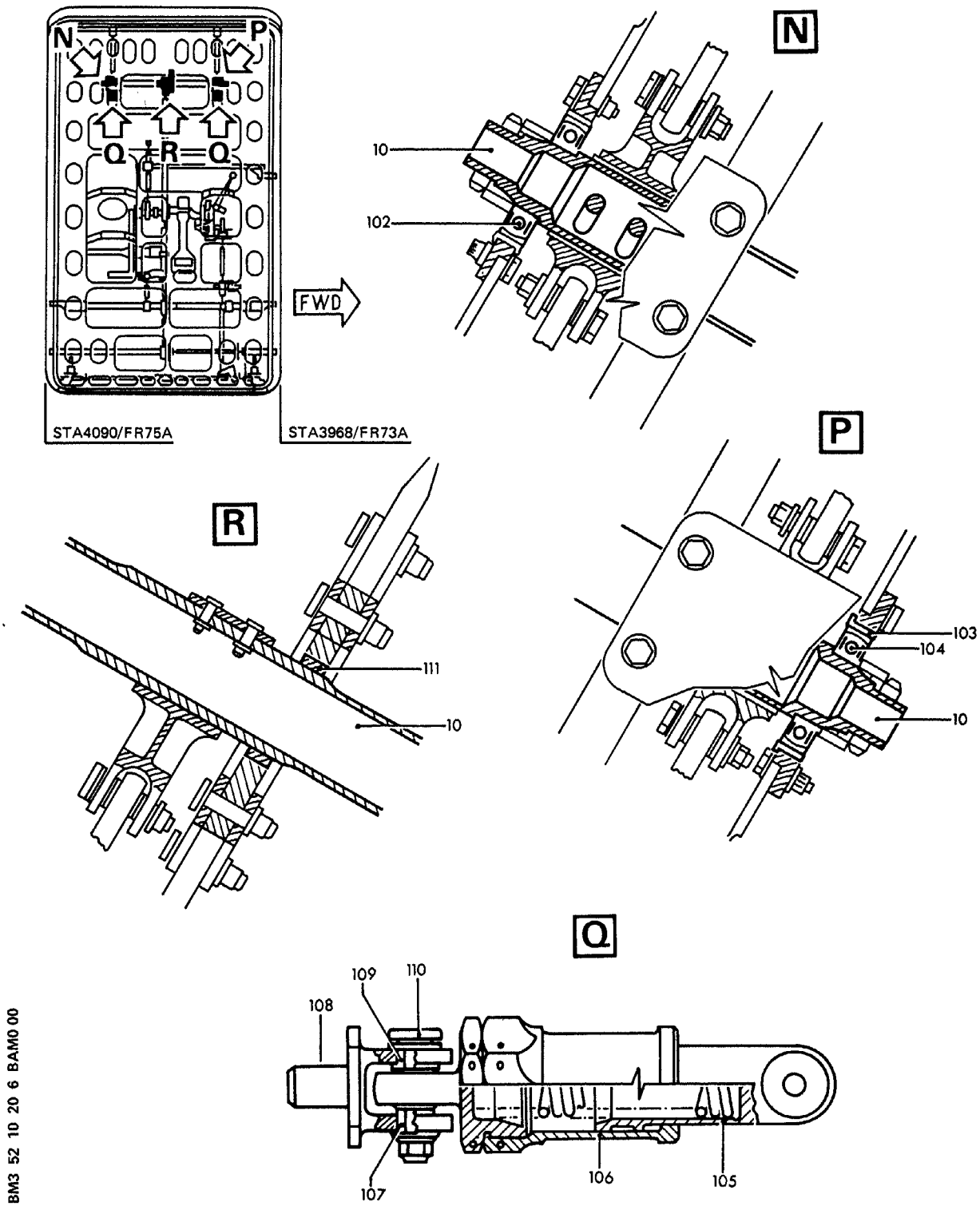


Lowering Shaft and Fitting with Guide Roller
Figure 611

Fit and Clearances
(Ref. Fig. 611)
(Ref. Fig. 612)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
K OD 94	9.497 (0.3739)	9.512 (0.3745)			9.476 (0.3731)		
			0.009 (0.0004)	0.033 (0.0013)			0.067 (0.0026)
K ID 93	9.521 (0.3748)	9.530 (0.3752)				9.543 (0.3757)	
L OD 98	6.319 (0.2488)	6.340 (0.2496)			6.285 (0.2474)		
			0.002 (0.0001)	0.046 (0.0018)			0.118 (0.0046)
L ID 100	6.342 (0.2497)	6.365 (0.2506)				6.403 (0.2521)	
L OD 100	9.497 (0.3739)	9.512 (0.3745)			9.476 (0.3731)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
L ID 101	9.525 (0.3750)	9.540 (0.3756)				9.561 (0.3764)	
L OD 100	9.511 (0.3744)	9.520 (0.3748)			9.505 (0.3742)		
			0.020 (0.0008)	0.052 (0.0020)			1)
L ID 99	9.540 (0.3756)	9.563 (0.3765)				1)	
N OD 10	25.375 (0.9990)	25.387 (0.9995)			25.359 (0.9984)		
			-0.012 -(0.0005)	0.025 (0.0010)			1)
N ID 102	25.375 (0.9990)	25.400 (1.0000)				1)	



Locking Shaft and Spring Rod Cylinder
Figure 612

Fits and Clearances (Ref. Fig. 612)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm Max.	Original Mfg Limits: Dimension (in.) Min.	Original Mfg Limits: Dimension (in.) Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm Max.	Original Mfg Limits: Assy. Clearance (in.) Min.	Original Mfg Limits: Assy. Clearance (in.) Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm Max.	In-Service Wear Limits: Dimension Limits (in.) Min.	In-Service Wear Limits: Dimension Limits (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm(in.)
P OD 10	25.375	25.387	(0.9990)	(0.9995)					25.359		(0.9984)		
					-0.012	0.025	-(0.0005)	(0.0010)					1)
P ID 104	25.375	25.400	(0.9990)	(1.0000)						1)			
P OD 104	49.187	49.212	(1.9365)	(1.9375)					1)				
					0.000	0.050	(0.0000)	(0.0020)					1)
P ID 103	49.212	49.237	(1.9375)	(1.9385)						49.274		(1.9399)	
Q OD 105	19.959	19.980	(0.7858)	(0.7866)					19.947		(0.7853)		
					0.040	0.082	(0.0016)	(0.0032)					0.125 (0.0049)
Q ID 106	20.020	20.041	(0.7882)	(0.7890)						20.072		(0.7902)	
Q OD 105	22.959	22.980	(0.9039)	(0.9047)					22.947		(0.9034)		
					0.040	0.082	(0.0016)	(0.0032)					0.125 (0.0049)
Q ID 106	23.020	23.041	(0.9063)	(0.9071)						23.072		(0.9083)	
Q OD 110	6.324	6.337	(0.2490)	(0.2495)					6.306		(0.2483)		
					0.005	0.027	(0.0002)	(0.0011)					0.058 (0.0023)
Q ID 109	6.342	6.351	(0.2497)	(0.2500)						6.364		(0.2506)	

Fits and Clearances (Ref. Fig. 612)

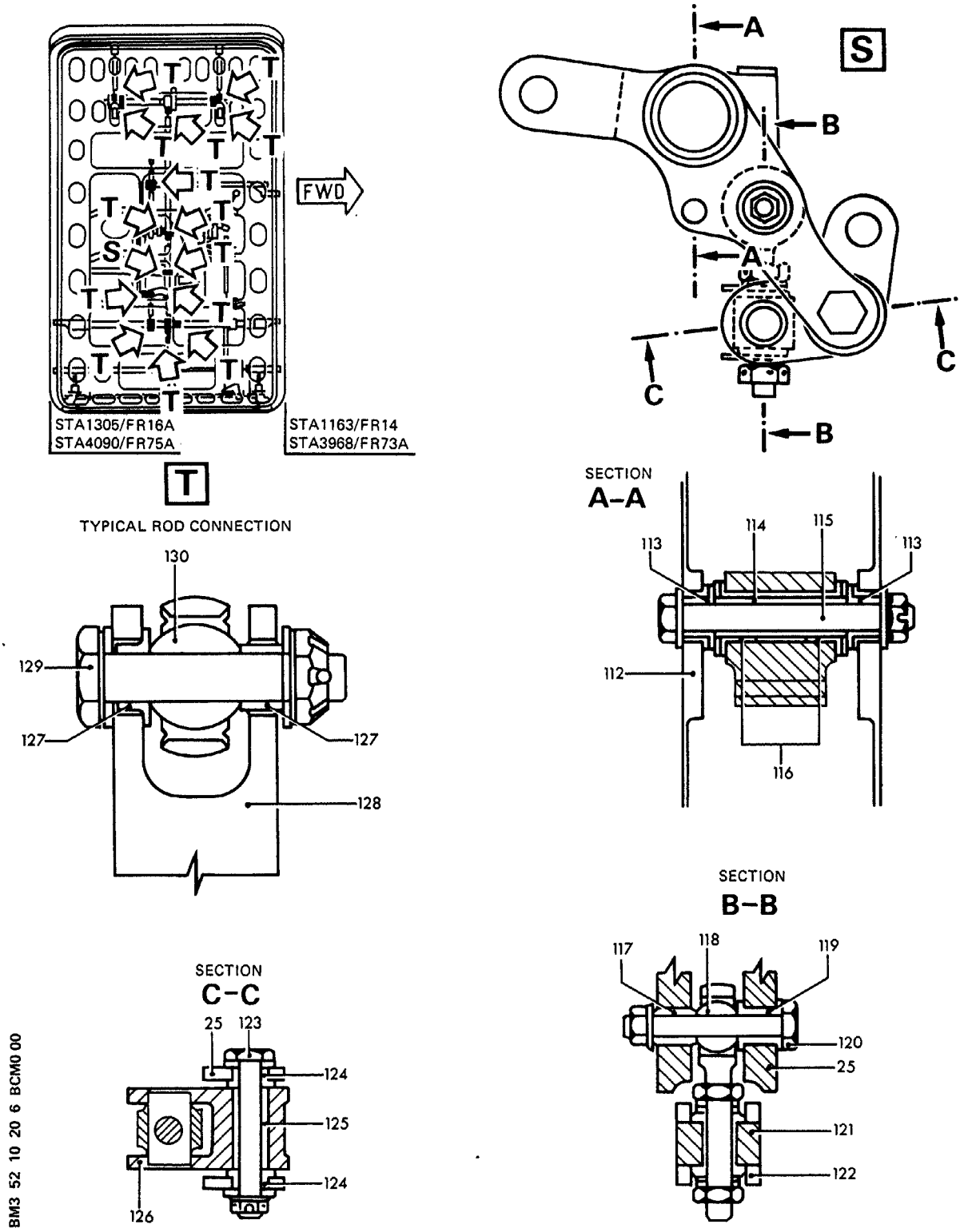
** ON AFT PASSENGER/CREW DOORS

	Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm Max.	In-Service Wear Limits: Max. Allow. clear mm(in.)
	Q OD 110	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
				0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
	Q ID 107	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
	Q OD 109	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
				0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
	Q ID 108	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
	Q OD 107	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
				0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
	Q ID 108	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
	R OD 10	33.475 (1.3179)	33.491 (1.3185)			33.452 (1.3170)		
R				0.31 (0.0122)	0.35 (0.0138)			0.548 (0.0216)
R	R ID 111	33.800 (1.3189)	33.825 (1.3199)				34.000 (1.3386)	

Fits and Clearances
(Ref. Fig. 613)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
S, A-A OD 115	9.500 (0.3740)	9.512 (0.3745)			9.483 (0.3733)		
			0.029 (0.0011)	0.050 (0.0020)			0.080 (0.0031)
S, A-A ID 114	9.541 (0.3756)	9.550 (0.3760)				9.563 (0.3765)	
A, A-A OD 114	12.698 (0.4999)	12.709 (0.5004)			12.691 (0.4996)		
			0.006 (0.0002)	0.043 (0.0017)			1)
S, A-A ID 116	12.715 (0.5006)	12.741 (0.5016)				1)	
S, A-A OD 115	9.500 (0.3740)	9.512 (0.3745)			9.483 (0.3733)		
			0.029 (0.0011)	0.050 (0.0020)			0.080 (0.0031)
S, A-A ID 113	9.541 (0.3756)	9.550 (0.3760)				9.563 (0.3765)	
S, A-A OD 113	12.683 (0.4993)	12.694 (0.4998)			12.667 (0.4987)		
			0.006 (0.0002)	0.035 (0.0013)			0.076 (0.0030)
S, A-A ID 112	12.700 (0.5000)	12.718 (0.5007)				12.743 (0.5017)	
S, B-B OD 120	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
S, B-B ID 117	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	



BM3 52 10 20 6 BCM0 00

Twin Lever and Rod Connections
Figure 613

Fits and Clearances (Ref. Fig. 613)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
S, B-B OD 117	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
S, B-B ID 25	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
S, B-B OD 120	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
S, B-B ID 119	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
S, B-B OD 119	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
S, B-B ID 25	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
S, B-B OD 120	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.000 (0.0000)	0.026 (0.0010)			1)
S, B-B ID 118	6.337 (0.2495)	6.350 (0.2500)				1)	
S, B-B OD 121	10.983 (0.4324)	10.994 (0.4328)			10.967 (0.4318)		
			0.006 (0.0002)	0.032 (0.0013)			0.069 (0.0027)
S, B-B ID 122	11.000 (0.4331)	11.015 (0.4337)				11.036 (0.4345)	

Fits and Clearances (Ref. Fig. 613)

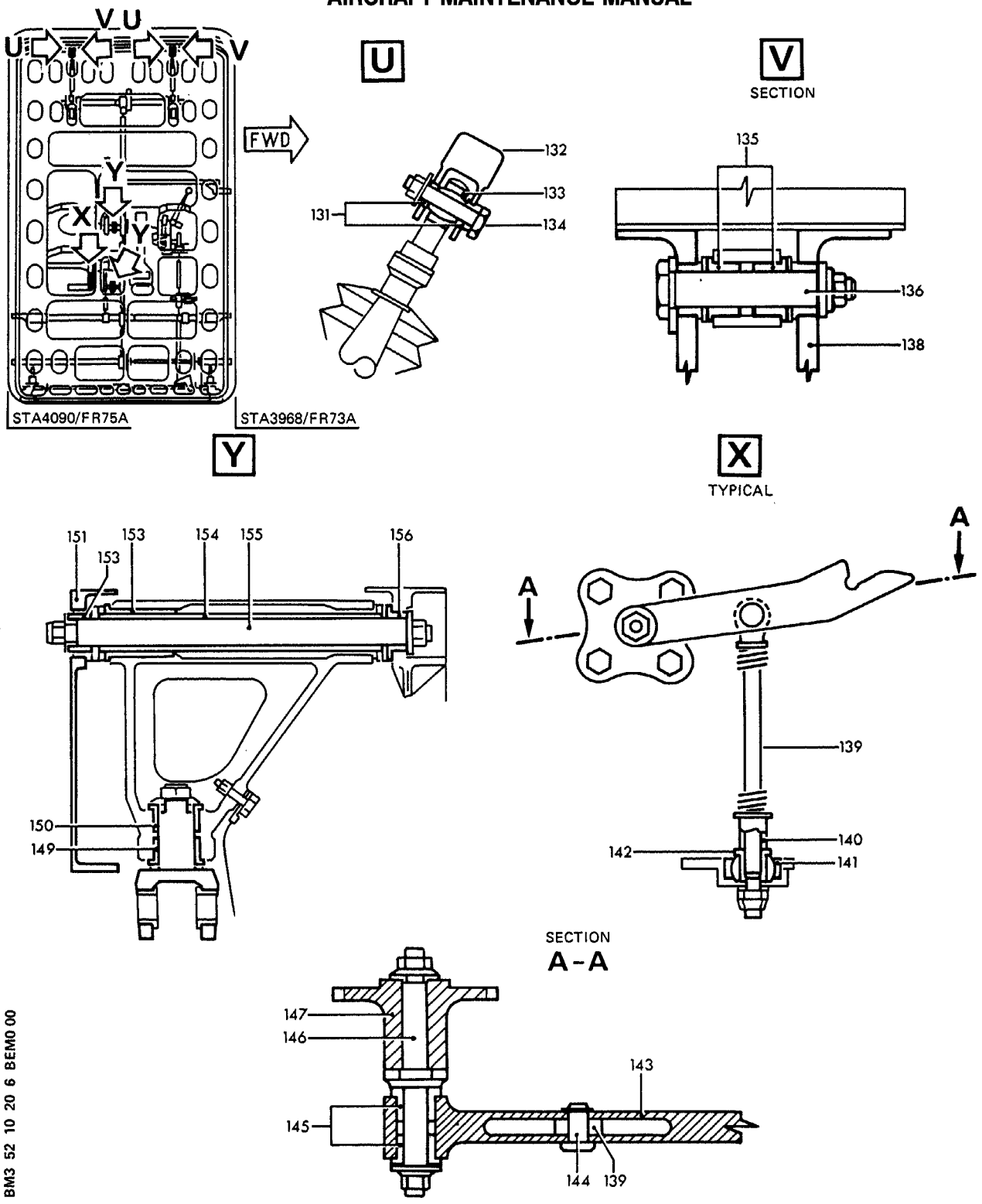
** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
S, C-C OD 123	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
S, C-C ID 125	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
S, C-C OD 125	7.956 (0.3132)	7.965 (0.3136)			7.950 (0.3130)		
			0.005 (0.0002)	0.029 (0.0011)			0.056 (0.0022)
S, C-C ID 126	7.970 (0.3138)	7.985 (0.3144)				8.006 (0.3152)	
S, C-C OD 123	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
S, C-C ID 124	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
S, C-C OD 124	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
S, C-C ID 25	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
T OD 129	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.000 (0.0000)	0.026 (0.0010)			1)
T ID 130	6.337 (0.2495)	6.350 (0.2500)				1)	

Fits and Clearances
(Ref. Fig. 613)
(Ref. Fig. 614)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
T OD 129	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
T ID 127	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
T OD 127	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
T ID 128	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
U OD 134	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
U ID 131	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
U OD 131	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
U ID 132	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
U OD 134	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.001 (0.00003)	0.026 (0.0010)			1)
U ID 133	6.338 (0.2495)	6.350 (0.2500)				1)	



Door Latches, Locking Mechanism for Control Handle and Connection Links
Figure 614

Fits and Clearances (Ref. Fig. 614)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm (Min.)	Original Mfg Limits: Dimension mm (Max.)	Original Mfg Limits: Assy. Clearance mm (Min.)	Original Mfg Limits: Assy. Clearance mm (Max.)	In-Service Wear Limits: Dimension Limits mm (Min.)	In-Service Wear Limits: Dimension Limits mm (Max.)	In-Service Wear Limits: Max. Allow. clear mm(in.)
V OD 136	9.526 (0.3750)	9.535 (0.3754)			9.520 (0.3748)		
			0.005 (0.0002)	0.037 (0.0015)			1)
V ID 135	9.540 (0.3756)	9.563 (0.3765)				1)	
V OD 136	9.526 (0.3750)	9.535 (0.3754)			9.520 (0.3748)		
			-0.010 -(0.0004)	0.014 (0.0006)			0.050 (0.0020)
V ID 138	9.525 (0.3750)	9.540 (0.3756)				9.570 (0.3768)	
X, A-A OD 146	6.336 (0.2494)	6.345 (0.2498)			6.323 (0.2489)		
			0.013 (0.0005)	0.044 (0.0017)			1)
X, A-A ID 145	6.358 (0.2503)	6.380 (0.2512)				1)	
X, A-A OD 146	6.336 (0.2494)	6.345 (0.2498)			6.323 (0.2489)		
			0.005 (0.0002)	0.029 (0.0011)			0.063 (0.0025)
X, A-A ID 147	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
X, A-A OD 144	4.791 (0.1886)	4.803 (0.1891)			4.773 (0.1879)		
			0.010 (0.0004)	0.034 (0.0013)			0.070 (0.0028)
X, A-A ID 143	4.813 (0.1895)	4.825 (0.1900)				4.843 (0.1907)	

Fits and Clearances (Ref. Fig. 614)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
X, A-A OD 144	4.791 (0.1886)	4.803 (0.1891)			4.773 (0.1879)		
			0.010 (0.0004)	0.034 (0.0013)			0.070 (0.0028)
X, A-A ID 139	4.813 (0.1895)	4.825 (0.1900)				4.843 (0.1907)	
X OD 139	6.486 (0.2554)	6.495 (0.2557)			6.480 (0.2551)		
			0.005 (0.0002)	0.029 (0.0011)			0.057 (0.0022)
X ID 140	6.500 (0.2559)	6.515 (0.2565)				6.536 (0.2573)	
X OD 139	6.486 (0.2554)	6.495 (0.2557)			6.480 (0.2551)		
			0.005 (0.0002)	0.029 (0.0011)			0.057 (0.0022)
X ID 142	6.500 (0.2559)	6.515 (0.2565)				6.536 (0.2573)	
X OD 142	9.497 (0.3739)	9.512 (0.3745)			9.476 (0.3731)		
			0.000 (0.0000)	0.028 (0.0011)			1)
X ID 141	9.512 (0.3745)	9.525 (0.3750)				1)	
Y OD 150	19.980 (0.7866)	19.993 (0.7871)			19.960 (0.7858)		
			0.007 (0.0003)	0.041 (0.0016)			0.092 (0.0036)
Y ID 149	20.000 (0.7854)	20.021 (0.7882)				20.052 (0.7894)	

Fits and Clearances (Ref. Fig. 614)

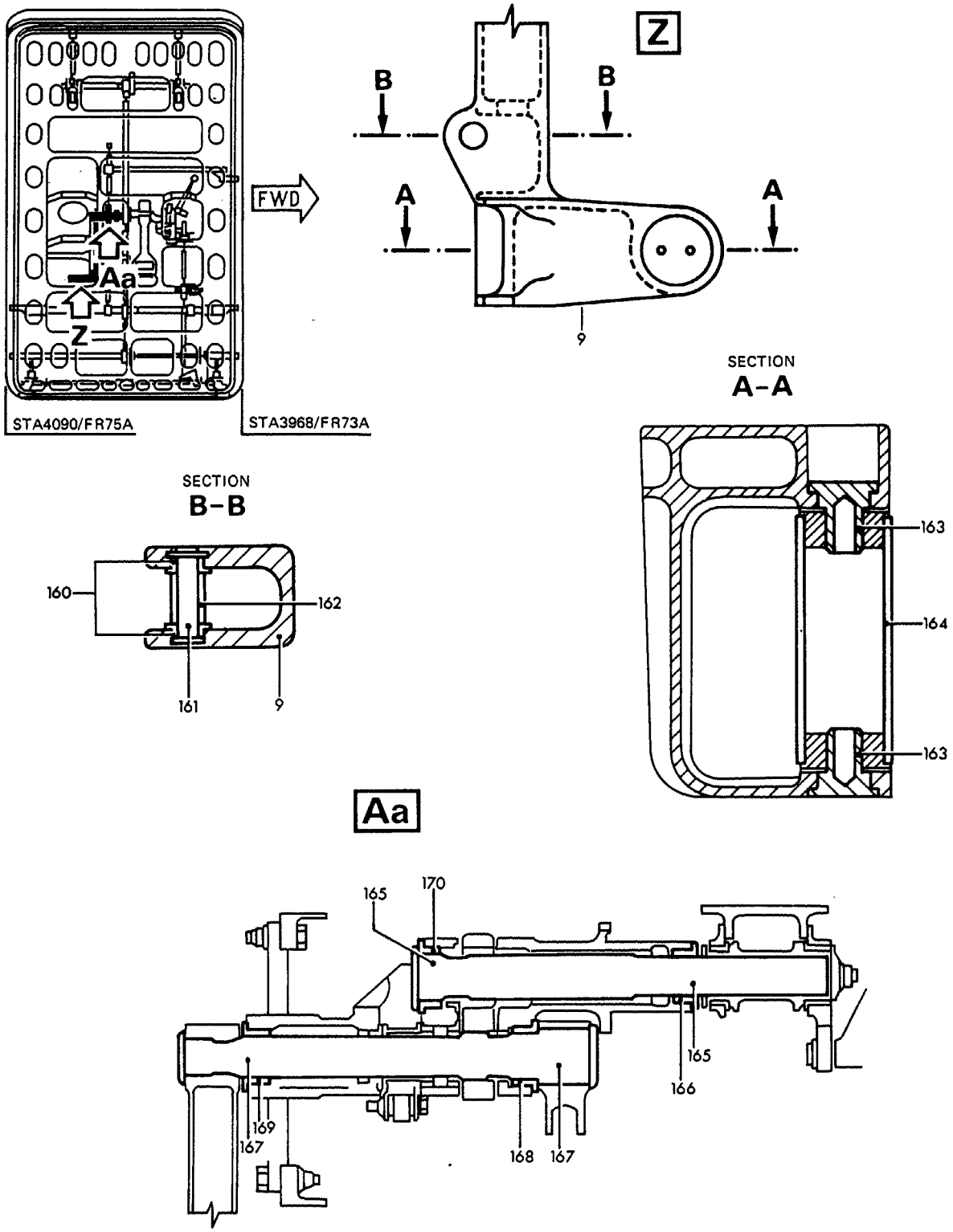
** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm (Min.)	Original Mfg Limits: Dimension mm (Max.)	Original Mfg Limits: Assy. Clearance mm (Min.)	Original Mfg Limits: Assy. Clearance mm (Max.)	In-Service Wear Limits: Dimension Limits mm (Min.)	In-Service Wear Limits: Dimension Limits mm (Max.)	In-Service Wear Limits: Max. Allow. clear mm(in.)
Y OD 155	15.983 (0.6293)	15.994 (0.6297)			15.967 (0.6286)		
			0.006 (0.0002)	0.035 (0.0014)			0.076 (0.0030)
Y ID 154	16.000 (0.6299)	16.018 (0.6306)				16.043 (0.6316)	
Y OD 154	19.050 (0.7500)	19.063 (0.7505)			19.042 (0.7497)		
			0.007 (0.0003)	0.051 (0.0020)			1)
Y ID 153	19.070 (0.7508)	19.101 (0.7520)				1)	
Y OD 155	15.983 (0.6293)	15.994 (0.6297)			15.967 (0.6286)		
			0.012 (0.0005)	0.034 (0.0013)			0.066 (0.0025)
Y ID 152	16.006 (0.6302)	16.017 (0.6306)				16.033 (0.6312)	
Y OD 152	19.980 (0.7866)	19.993 (0.7871)			19.960 (0.7858)		
			0.007 (0.0003)	0.041 (0.0016)			0.092 (0.0036)
Y ID 151	20.000 (0.7874)	20.021 (0.7882)				20.052 (0.7884)	
Y OD 155	15.983 (0.6293)	15.994 (0.6297)			15.967 (0.6286)		
			0.006 (0.0002)	0.035 (0.0014)			0.076 (0.0030)
Y ID 156	16.000 (0.6299)	16.018 (0.6306)				16.043 (0.6316)	

Fits and Clearances
(Ref. Fig. 615)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
Z, A-A OD 163	12.680 (0.4992)	12.700 (0.5000)			12.670 (0.4988)		
			0.015 (0.0006)	0.061 (0.0024)			0.225 (0.0089)
Z, A-A ID 164	12.715 (0.5006)	12.741 (0.5016)				12.895 (0.5077)	
Z, B-B OD 161	4.791 (0.1886)	4.803 (0.1891)			4.773 (0.1879)		
			0.010 (0.0004)	0.034 (0.0013)			0.070 (0.0028)
Z, B-B ID 162	4.813 (0.1895)	4.825 (0.1900)				4.843 (0.1907)	
Z, B-B OD 161	4.791 (0.1886)	4.803 (0.1891)			4.773 (0.1879)		
			0.014 (0.0006)	0.034 (0.0013)			0.062 (0.0024)
Z, B-B ID 160	4.817 (0.1896)	4.825 (0.1900)				4.835 (0.1904)	
Z, B-B OD 160	6.972 (0.2746)	6.987 (0.2751)			6.951 (0.2737)		
			0.013 (0.0005)	0.043 (0.0017)			0.139 (0.0055)
Z, B-B ID 9	7.000 (0.2756)	7.015 (0.2762)				7.090 (0.2791)	
Aa OD 165	22.233 (0.8753)	22.246 (0.8758)			22.225 (0.8750)		
			0.002 (0.0001)	0.045 (0.0018)			0.099 (0.0039)
Aa ID 166	22.248 (0.8759)	22.278 (0.8771)				22.324 (0.8789)	



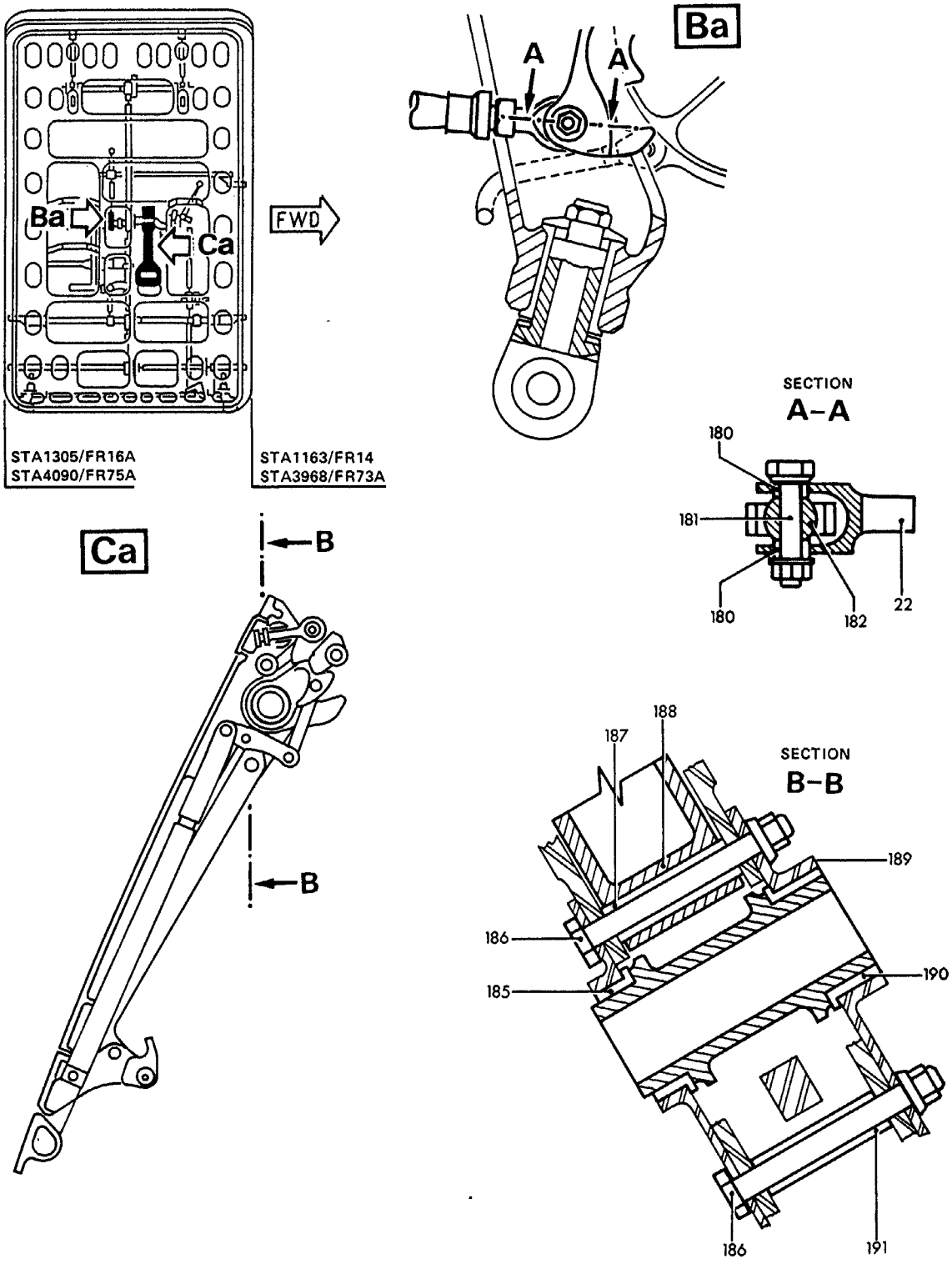
BM3 52 10 20 6 BGM0 00

Interior Control Handle and Gear Box
Figure 615

Fits and Clearances
(Ref. Fig. 615)
(Ref. Fig. 616)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm (in.) Min.	Original Mfg Limits: Dimension mm (in.) Max.	Original Mfg Limits: Assy. Clearance mm (in.) Min.	Original Mfg Limits: Assy. Clearance mm (in.) Max.	In-Service Wear Limits: Dimension Limits mm (in.) Min.	In-Service Wear Limits: Dimension Limits mm (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm(in.)
Aa OD 167	25.410 (1.0004)	25.423 (1.0009)			25.402 (1.0001)		
			0.002 (0.0001)	0.046 (0.0018)			1)
Aa ID 168	25.425 (1.0010)	25.456 (1.0022)				1)	
Aa OD 167	22.233 (0.8753)	22.246 (0.8758)			22.225 (0.8750)		
			0.002 (0.0001)	0.045 (0.0018)			1)
Aa ID 169	22.248 (0.8759)	22.278 (0.8771)				1)	
Aa OD 165	25.410 (1.0004)	25.423 (1.0009)			25.402 (1.0001)		
			0.002 (0.0001)	0.046 (0.0018)			1)
Aa ID 170	25.425 (1.0010)	25.456 (1.0022)				1)	
Ba,A-A OD 181	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.001 (0.00004)	0.026 (0.0010)			1)
Ba,A-A ID 182	6.338 (0.2495)	6.350 (0.2500)				1)	
Ba,A-A OD 181	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
Ba,A-A ID 180	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	



Locking of Door Mechnism in High Position
and Exterior Control Handle
Figure 616

Fits and Clearances (Ref. Fig. 616)

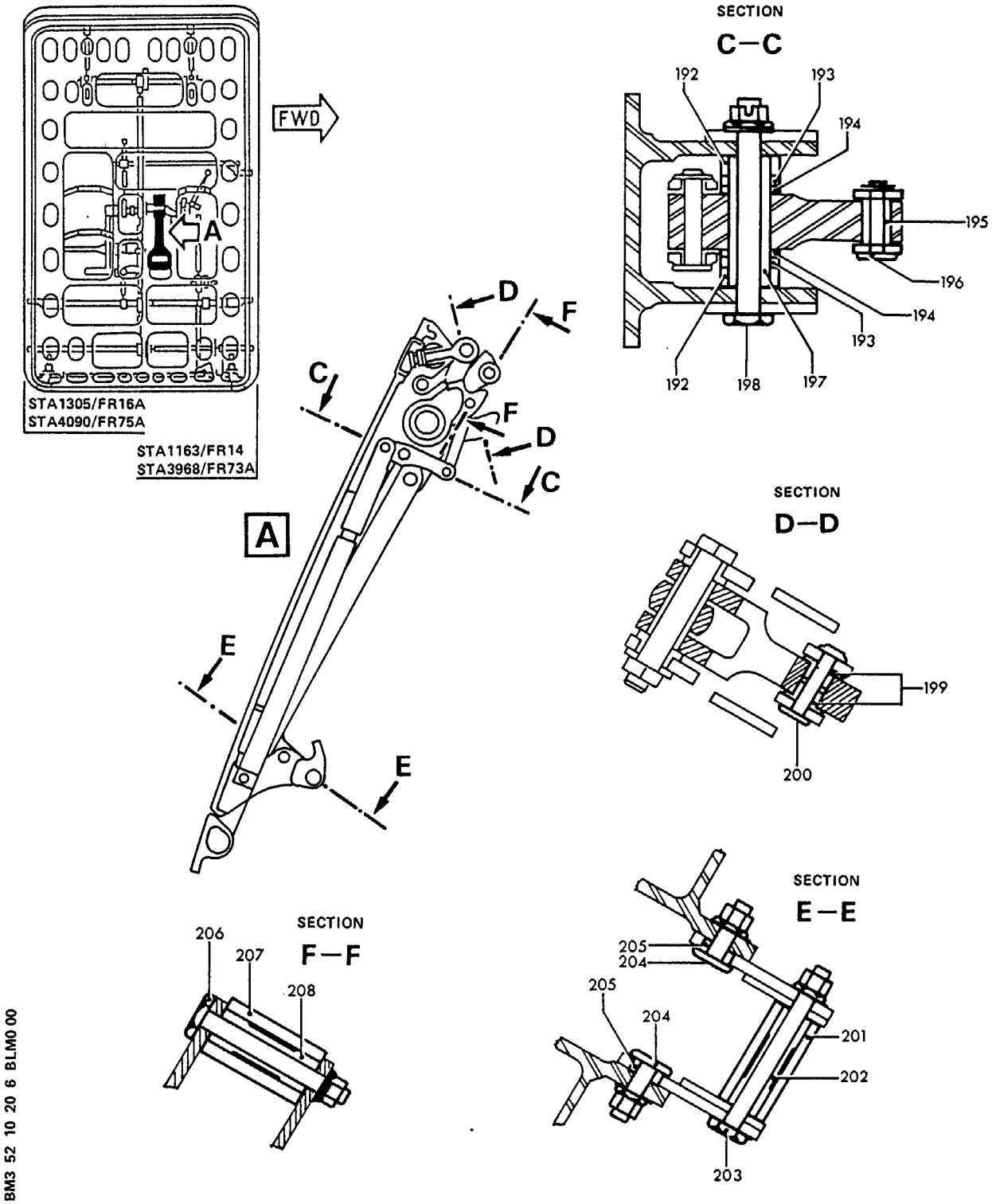
** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
Ba,A-A OD 180	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0020)			0.085 (0.0033)
Ba,A-A ID 22	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
Ca,B-B OD 189	25.408 (1.0003)	25.421 (1.0008)			25.385 (0.9994)		
			0.004 (0.0002)	0.048 (0.0019)			0.090 (0.0035)
Ca,B-B ID 190	25.425 (1.0010)	25.456 (1.0022)				25.475 (1.0029)	
Ca,B-B OD 189	25.408 (1.0003)	25.421 (1.0008)			25.385 (0.9994)		
			0.004 (0.0002)	0.048 (0.0019)			0.090 (0.0035)
Ca,B-B ID 185	25.425 (1.0010)	25.456 (1.0022)				25.475 (1.0029)	
Ca,B-B OD 186	6.324 (0.2490)	6.337 (0.2495)			6.212 (0.2446)		
			0.163 (0.0064)	0.276 (0.0109)			0.500 (0.0197)
Ca,B-B ID 191	6.500 (0.2559)	6.600 (0.2598)				6.712 (0.2643)	
Ca,B-B OD 186	6.324 (0.2490)	6.337 (0.2495)			6.300 (0.2480)		
			0.013 (0.0005)	0.041 (0.0016)			0.080 (0.0031)
Ca,B-B ID 187	6.350 (0.2500)	6.365 (0.2506)				6.380 (0.2512)	

Fits and Clearances
(Ref. Fig. 616)
(Ref. Fig. 617)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
Ca,B-B OD 187	9.506 (0.3743)	9.515 (0.3747)			9.490 (0.3736)		
			0.005 (0.0002)	0.029 (0.0011)			0.080 (0.0031)
Ca,B-B ID 188	9.520 (0.3748)	9.535 (0.3754)				9.550 (0.3760)	
C-C OD 198	6.324 (0.2490)	6.337 (0.2495)			6.310 (0.2484)		
			0.003 (0.0001)	0.031 (0.0012)			0.060 (0.0024)
C-C ID 197	6.340 (0.2496)	6.355 (0.2502)				6.370 (0.2508)	
C-C OD 197	8.465 (0.3333)	8.487 (0.3341)			8.420 (0.3315)		
			0.063 (0.0025)	0.095 (0.0037)			0.190 (0.0075)
C-C ID 192	8.550 (0.3366)	8.560 (0.3370)				8.610 (0.3390)	
C-C OD 197	8.465 (0.3333)	8.487 (0.3341)			8.420 (0.3315)		
			0.063 (0.0025)	0.095 (0.0037)			0.190 (0.0075)
C-C ID 194	8.550 (0.3366)	8.560 (0.3370)				8.610 (0.3390)	
C-C OD 197	8.465 (0.3333)	8.487 (0.3341)			8.440 (0.3323)		
			0.013 (0.0005)	0.050 (0.0020)			0.100 (0.0039)
C-C ID 193	8.500 (0.3346)	8.515 (0.3352)				8.540 (0.3362)	



Exterior Control Handle
Figure 617

Fits and Clearances (Ref. Fig. 617)

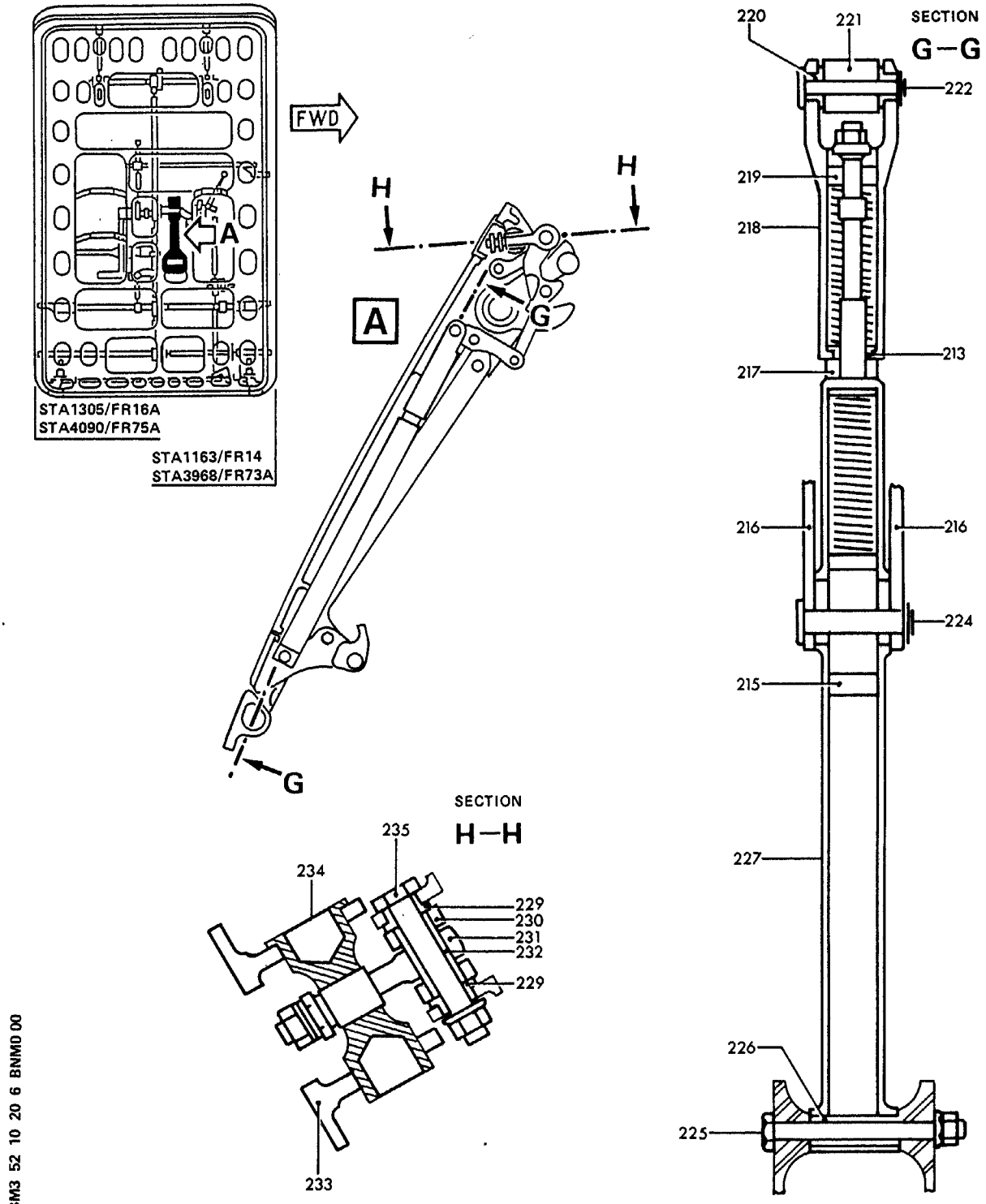
** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
C-C OD 196	3.972 (0.1564)	3.990 (0.1571)			3.952 (0.1556)		
			0.010 (0.0004)	0.040 (0.0016)			0.080 (0.0031)
C-C ID 195	4.000 (0.1575)	4.012 (0.1580)				4.032 (0.1587)	
D-D OD 200	3.972 (0.1564)	3.990 (0.1571)			3.952 (0.1555)		
			0.010 (0.0004)	0.040 (0.0016)			0.080 (0.0031)
D-D ID 199	4.000 (0.1575)	4.012 (0.1580)				4.032 (0.1587)	
E-E OD 203	4.800 (0.1890)	4.813 (0.1895)			4.788 (0.1885)		
			0.003 (0.0001)	0.026 (0.0010)			0.050 (0.0020)
E-E ID 202	4.816 (0.1896)	4.826 (0.1900)				4.838 (0.1905)	
E-E OD 202	7.965 (0.3136)	7.987 (0.3144)			7.940 (0.3126)		
			0.013 (0.0005)	0.050 (0.0020)			0.100 (0.0039)
E-E ID 201	8.000 (0.3150)	8.015 (0.3155)				7.840 (0.3165)	
E-E OD 204	4.800 (0.1890)	4.813 (0.1895)			4.788 (0.1885)		
			0.003 (0.0001)	0.026 (0.0010)			0.050 (0.0020)
E-E ID 205	4.816 (0.1896)	4.826 (0.1900)				4.838 (0.1905)	

Fits and Clearances
(Ref. Fig. 617)
(Ref. Fig. 618)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
F-F OD 206	4.800 (0.1890)	4.813 (0.1895)			4.788 (0.1885)		
			0.003 (0.0001)	0.026 (0.0010)			0.050 (0.0020)
F-F ID 208	4.816 (0.1896)	4.826 (0.1900)				4.838 (0.1905)	
F-F OD 208	7.965 (0.3136)	7.988 (0.3145)			7.940 (0.3126)		
			0.012 (0.0005)	0.050 (0.0020)			0.100 (0.0039)
F-F ID 207	8.000 (0.3150)	8.015 (0.3156)				8.040 (0.3165)	
G-G OD 225	4.800 (0.1890)	4.813 (0.1895)			4.788 (0.1885)		
			0.003 (0.0001)	0.026 (0.0010)			0.050 (0.0020)
G-G ID 226	4.816 (0.1896)	4.826 (0.1900)				4.838 (0.1905)	
G-G OD 226	7.986 (0.3144)	7.995 (0.3148)			7.970 (0.3138)		
			0.005 (0.0002)	0.029 (0.0011)			0.060 (0.0024)
G-G ID 227	8.000 (0.3150)	8.015 (0.3156)				8.030 (0.3161)	
G-G OD 215	11.957 (0.4707)	11.984 (0.4718)			11.887 (0.4680)		
			0.016 (0.0006)	0.143 (0.0056)			0.280 (0.0110)
G-G ID 227	12.000 (0.4724)	12.100 (0.4764)				12.167 (0.4790)	



Exterior Control Handle
Figure 618

Fits and Clearances (Ref. Fig. 618)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
G-G OD 224	5.988 (0.2357)	5.996 (0.2361)			5.975 (0.2352)		
			0.004 (0.0002)	0.024 (0.0009)			0.050 (0.0020)
G-G ID 216	6.000 (0.2362)	6.012 (0.2367)				6.025 (0.2372)	
G-G OD 227	6.465 (0.2545)	6.487 (0.2554)			6.433 (0.2533)		
			0.013 (0.0005)	0.057 (0.0022)			0.120 (0.0047)
G-G ID 217	6.500 (0.2559)	6.522 (0.2568)				6.553 (0.2580)	
G-G OD 227	4.800 (0.1890)	4.813 (0.1895)			4.783 (0.1883)		
			0.002 (0.0001)	0.035 (0.0014)			0.070 (0.0028)
G-G ID 219	4.815 (0.1896)	4.835 (0.1904)				4.853 (0.1911)	
G-G OD 222	3.988 (0.1570)	3.996 (0.1573)			3.970 (0.1563)		
			0.014 (0.0006)	0.034 (0.0013)			0.070 (0.0028)
G-G ID 220	4.010 (0.1579)	4.022 (0.1583)				4.040 (0.1591)	
G-G OD 222	3.988 (0.1570)	3.996 (0.1573)			3.975 (0.1565)		
			0.004 (0.0002)	0.024 (0.0009)			0.050 (0.0020)
G-G ID 221	4.000 (0.1575)	4.012 (0.1580)				4.025 (0.1585)	

Fits and Clearances (Ref. Fig. 618)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
G-G OD 219	11.957 (0.4707)	11.985 (0.4719)			11.928 (0.4696)		
			0.015 (0.0006)	0.061 (0.0024)			0.120 (0.0047)
G-G ID 218	12.000 (0.4724)	12.018 (0.4731)				12.048 (0.4743)	
G-G OD 227	6.465 (0.2545)	6.487 (0.2554)			6.433 (0.2533)		
			0.013 (0.0005)	0.057 (0.0022)			0.120 (0.0047)
G-G ID 223	6.500 (0.2559)	6.522 (0.2568)				6.553 (0.2580)	
H-H OD 235	6.324 (0.2490)	6.337 (0.2495)			6.298 (0.2480)		
			0.013 (0.0005)	0.048 (0.0019)			0.092 (0.0036)
H-H ID 232	6.350 (0.2500)	6.372 (0.2509)				6.390 (0.2516)	
H-H OD 235	6.324 (0.2490)	6.337 (0.2495)			6.300 (0.2480)		
			0.013 (0.0005)	0.041 (0.0016)			0.080 (0.0031)
H-H ID 229	6.350 (0.2500)	6.365 (0.2506)				6.380 (0.2512)	
H-H OD 232	9.506 (0.3743)	9.515 (0.3746)			9.490 (0.3736)		
			0.005 (0.0002)	0.029 (0.0011)			0.060 (0.0024)
H-H ID 230	9.520 (0.3748)	9.535 (0.3754)				9.550 (0.3760)	

Fits and Clearances (Ref. Fig. 618)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm(in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
H-H OD 232	9.506 (0.3743)	9.515 (0.3746)			9.490 (0.3736)		
			0.005 (0.0002)	0.029 (0.0011)			0.060 (0.0024)
H-H ID 231	9.520 (0.3748)	9.535 (0.3754)				9.550 (0.3760)	
H-H OD 234	17.983 (0.7080)	17.994 (0.7084)			17.966 (0.7073)		
			0.006 (0.0002)	0.035 (0.0014)			0.070 (0.0028)
H-H ID 233	18.000 (0.7087)	18.018 (0.7094)				18.036 (0.7101)	

FWD, AFT EMERGENCY ESCAPE SLIDE RELEASE MECHANISM - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Reason for the Job

A. Removal for replacement of:

NOTE : Item numbers correspond with operations in Paras. 3.B and 3.D.

(1)Release mechanism and emergency control handle
(2)Stop lever and bellcrank unit
(3)Locking unit
(4)Bellcrank unit (lateral)
(5)Sliders and girt bar
(6)Bellcrank unit (middle)
(7)Linkage guide

** ON DOOR SERIAL NOS. 1245 AND SUBSEQUENT

(8)Blanking device.

** ON DOOR SERIAL NOS. ALL

2. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
	B. 98A52108007001	Tool Set - R/I MID and AFT Passenger/Crew Doors
	C.	Torque Wrench, 0.2 to 2.0 m.daN (18 to 180 lbf.in.)
	D.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.025 in.)
	E.	Cotter Pins
	F. Material No. 04-004	Common Greases (Ref. 20-31-00)
R	G. Material No. 04-017	Common Greases (Ref. 20-31-00)
R	H. Material No. 04-022	Common Greases (Ref. 20-31-00)
	I. Material No. 05-002	Special Materials (Ref. 20-31-00)
	J. Material No. 05-005	Special Materials (Ref. 20-31-00)
	K. Material No. 05-027	Special Materials (Ref. 20-31-00)
	L. Material No. 09-013	Sealants (Ref. 20-31-00)
	M. Material No. 16-001	Structure Paints (Ref. 20-31-00)
	N. Material No. 16-002	Structure Paints (Ref. 20-31-00)

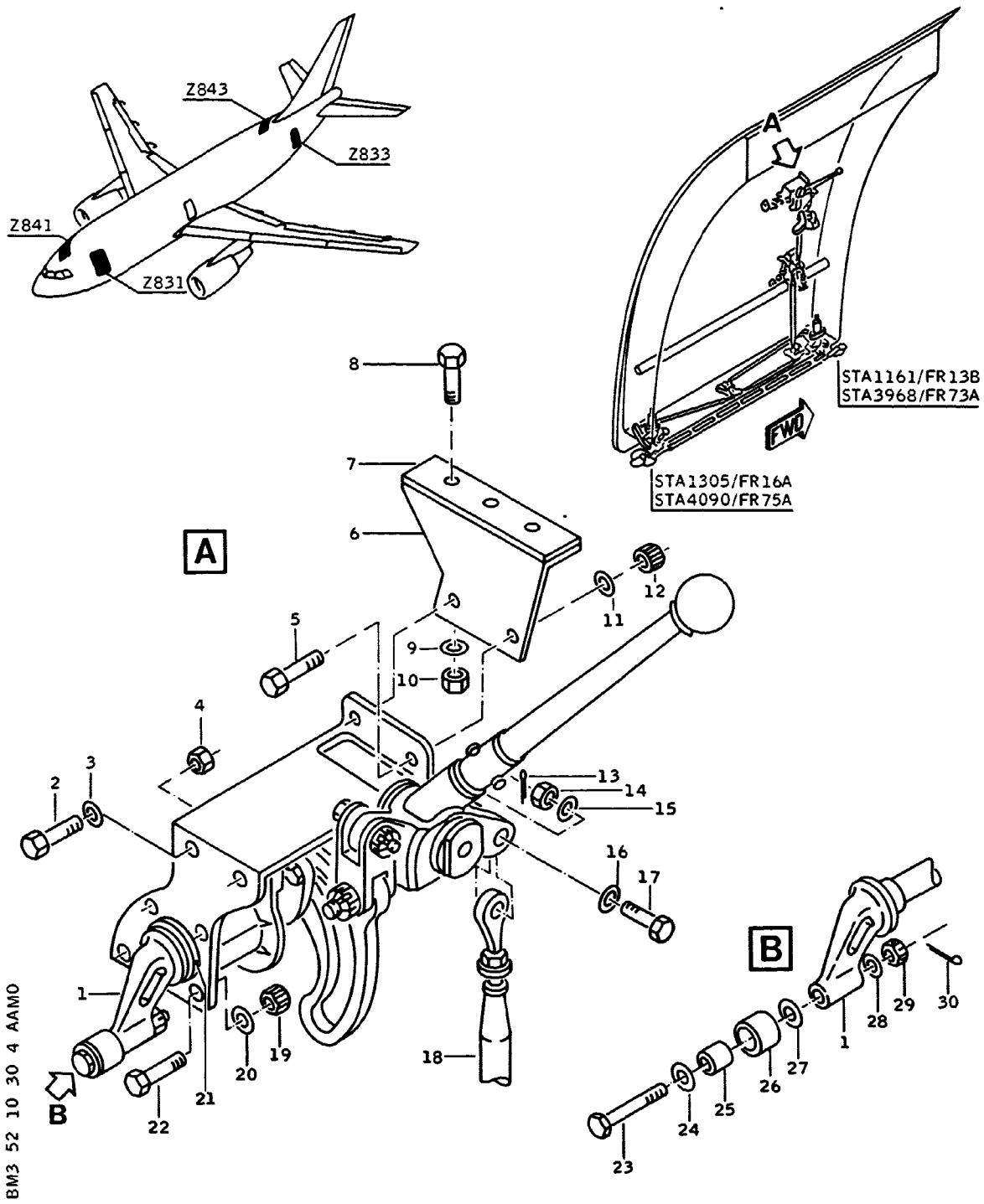
Referenced Procedures

- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-14, P. Block 501	FWD, AFT Door Damper and Emergency Operation Cylinder
- 52-10-30, P. Block 501	FWD, AFT Emergency Escape Slide Release Mechanism
- 52-11-21, P. Block 401	FWD Door Locking Mechanism
- 52-13-21, P. Block 401	AFT Door Locking Mechanism
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 401	Limit Switch
- 52-73-13, P. Block 501	Limit Switch

3. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open door.
(4)Remove either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
NOTE : It is not necessary to remove the emergency escape slide for removal/installation of the following components:
- Release mechanism and emergency control handle
- Stop lever and bellcrank unit.
(5)Remove corresponding door lining and insulation to gain access to the components of emergency escape slide release mechanism (Ref. 52-10-13, P. Block 401).

B. Removal
NOTE : Bushes at all fork and eye ends must be removed, cleaned and coated with Mastinox (Material No. 05-002) and reinstalled before installation of rods or other components.
(1)Release Mechanism and Emergency Control Handle (Ref. Fig. 401)
(a)Remove exterior control handle (Ref. 52-11-21, P. Block 401), (Ref. 52-13-21, P. Block 401).
(b)Disconnect rod (18) by removing cotter pin (13), nut (14), washers (15),(16) and bolt (17).
(c)Remove nuts (4), washers (3) and bolts (2).
(d)Remove nuts (19), washers (20) and bolts (22).
(e)Remove nuts (12), washers (11) and bolts (5).
(f)Remove bracket (6) with plate (7), nuts (10), washers (9) and bolts (8).
(g)Retract release mechanism and emergency control handle with O-ring (21) from door structure.



Release Mechanism and Emergency Control Handle
Figure 401

(h)Remove roller assy (26) from lever (1) as follows:
1 Remove cotter pin (30), nut (29) and washer (28).
2 Remove bolt (23), washers (24),(27) and roller assy (26) with spacer (25).

(2)Stop Lever and Bellcrank Unit
(Ref. Fig. 402)
(Ref. Fig. 403)
(a)Disconnect rod (18) by removing cotter pin (43), nut (44), washers (45),(48) and bolt (49).
(b)Disconnect rod (54) by removing cotter pin (57), nut (56), washers (55),(53) and bolt (52).
(c)Disconnect electrical connector (47) from limit switch.
(d)Remove limit switch (Ref. 52-73-13, P. Block 401).

** ON FWD PASSENGER/CREW DOORS

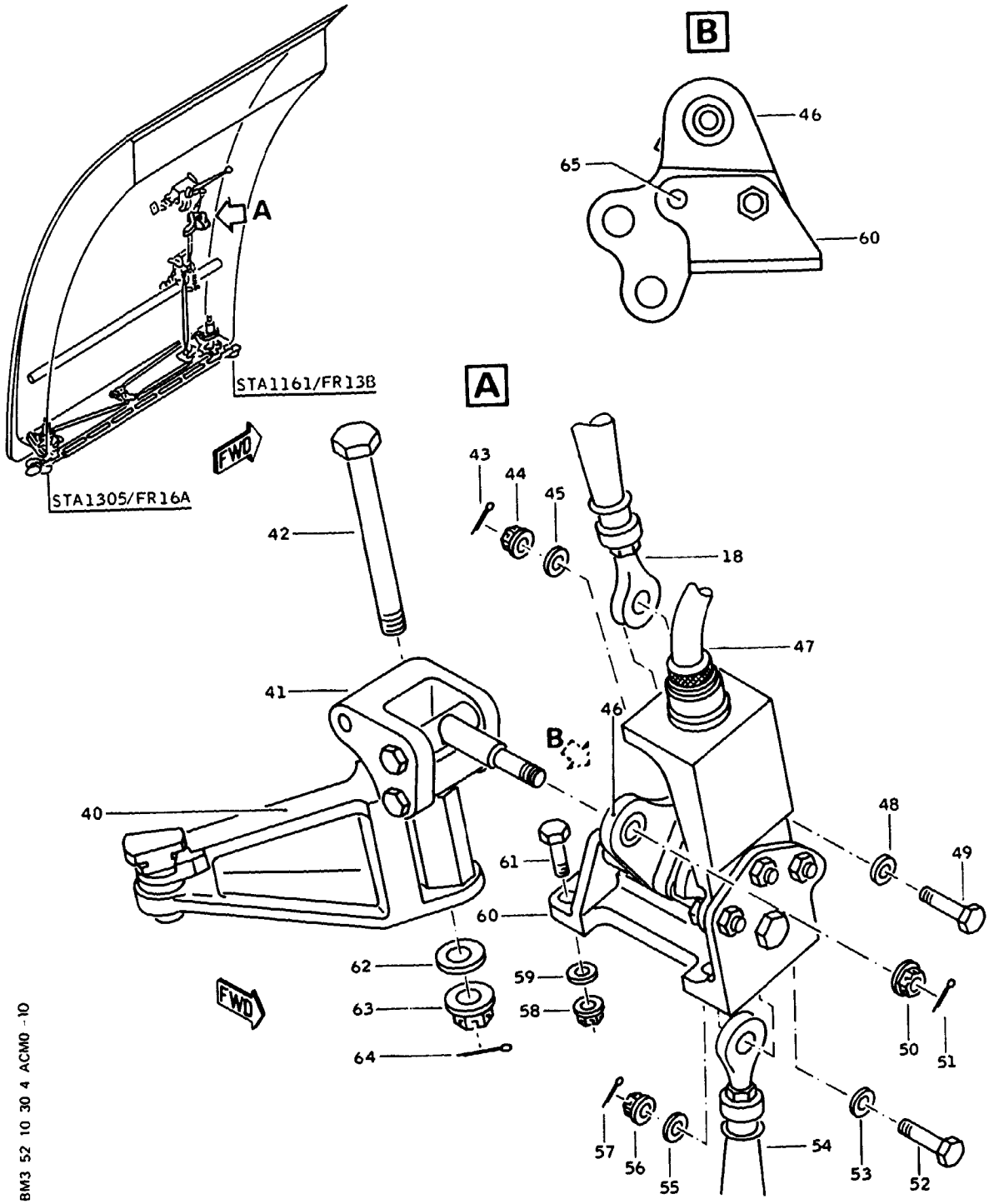
(e)Remove cotter pin (51) and nut (50).
(f)Remove cotter pin (64,) nut (63), washer (62) and bolt (42).
(g)Remove stop lever (40) with bellcrank (41).
(h)Remove nuts (58), washers (59) and bolts (61).
(i)Remove bellcrank (46) with fitting (60).

** ON AFT PASSENGER/CREW DOORS

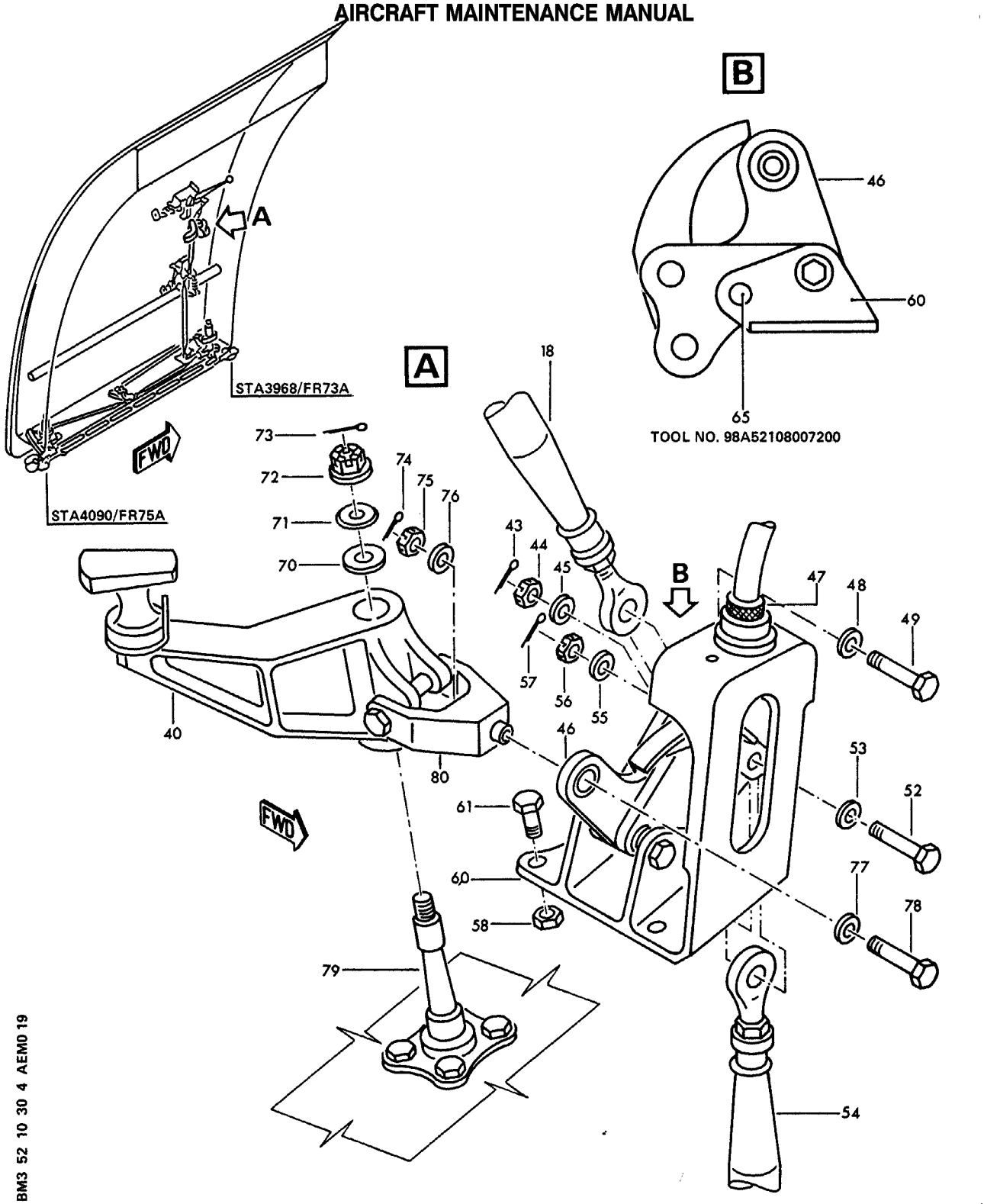
(e)Remove cotter pin (74), nut (75), washers (76),(77) and bolt (78).
(f)Remove cotter pin (73), nut (72) and washers (71),(70).
(g)Remove nuts (58) and bolts (61).
(h)Remove bellcrank (46) with fitting (60).
(i)Remove stop lever (40) with yoke (80) from bolt (79).

** ON FWD AND AFT PASSENGER/CREW DOORS

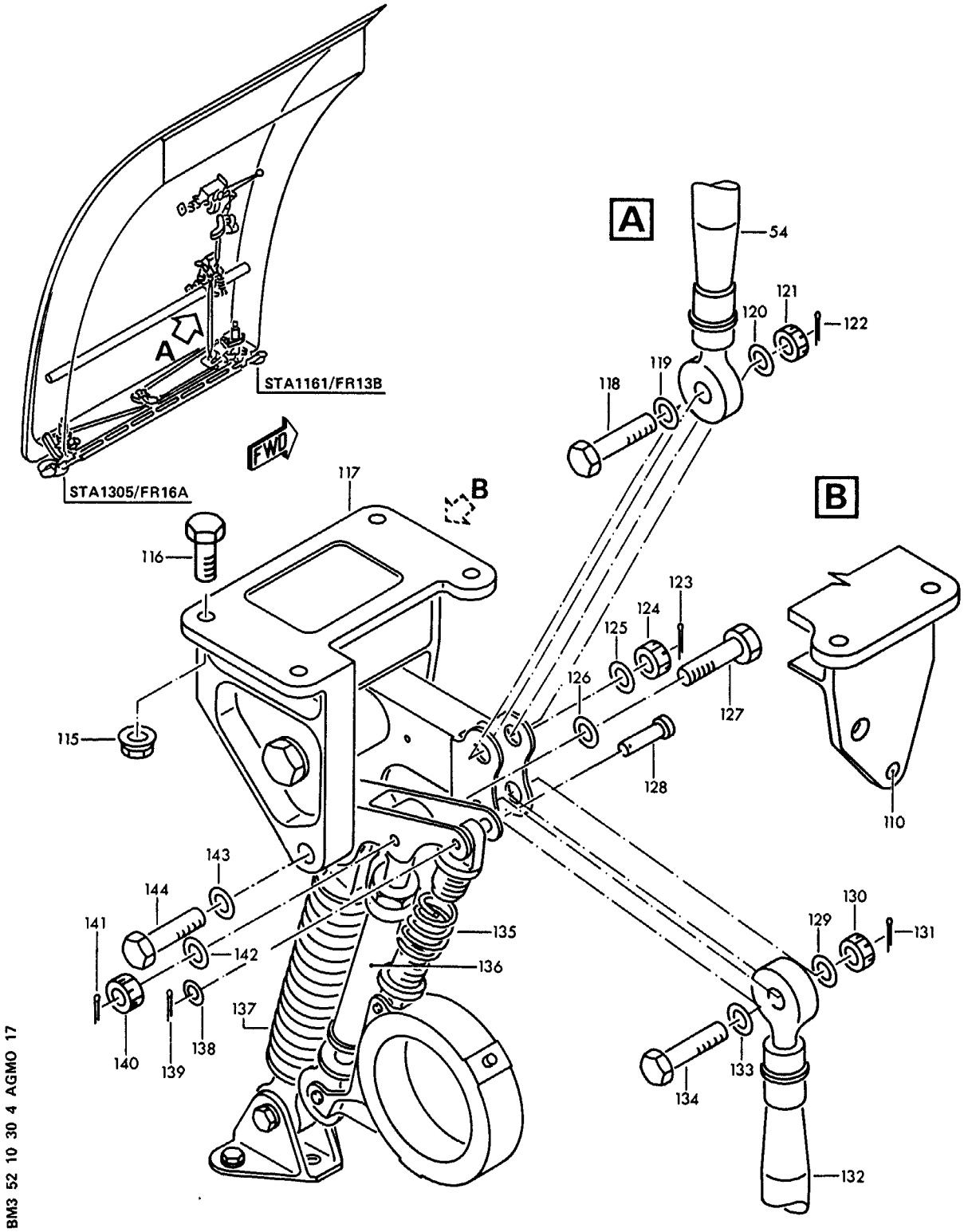
(3)Locking Unit
(Ref. Fig. 404)
(Ref. Fig. 405)
(a)Disconnect rod (54) by removing cotter pin (122), nut (121), washers (120),(119) and bolt (118).
(b)Disconnect rod (132) by removing cotter pin (131), nut (130), washers (129),(133) and bolt (134).



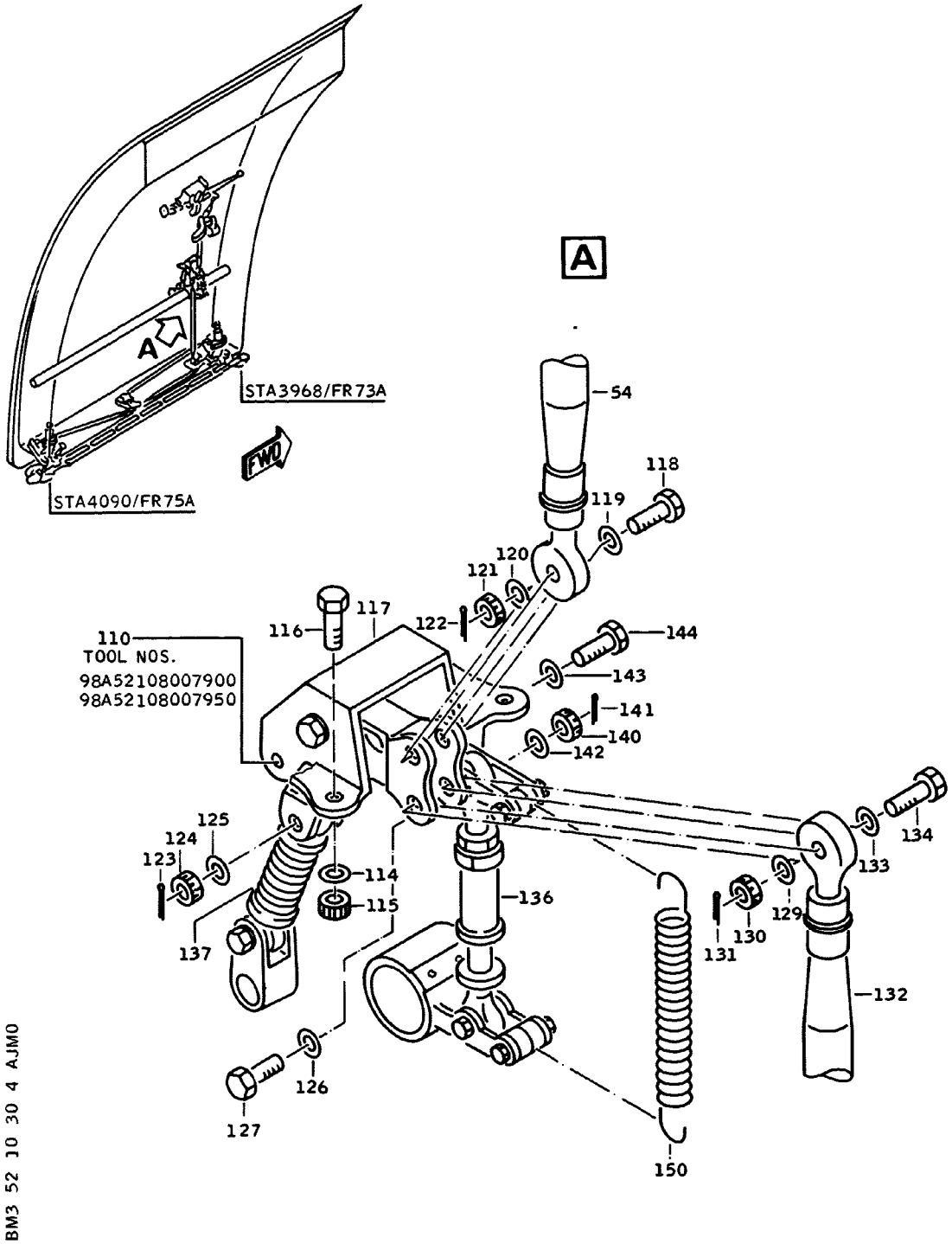
FWD Passenger/Crew Doors -
Stop Lever and Bellcrank Unit
Figure 402



AFT Passenger/Crew Doors -
Stop Lever and Bellcrank Unit
Figure 403



FWD Passenger/Crew Doors - Locking Unit
Figure 404



AFT Passenger/Crew Doors - Locking Unit
Figure 405

** ON FWD PASSENGER/CREW DOORS

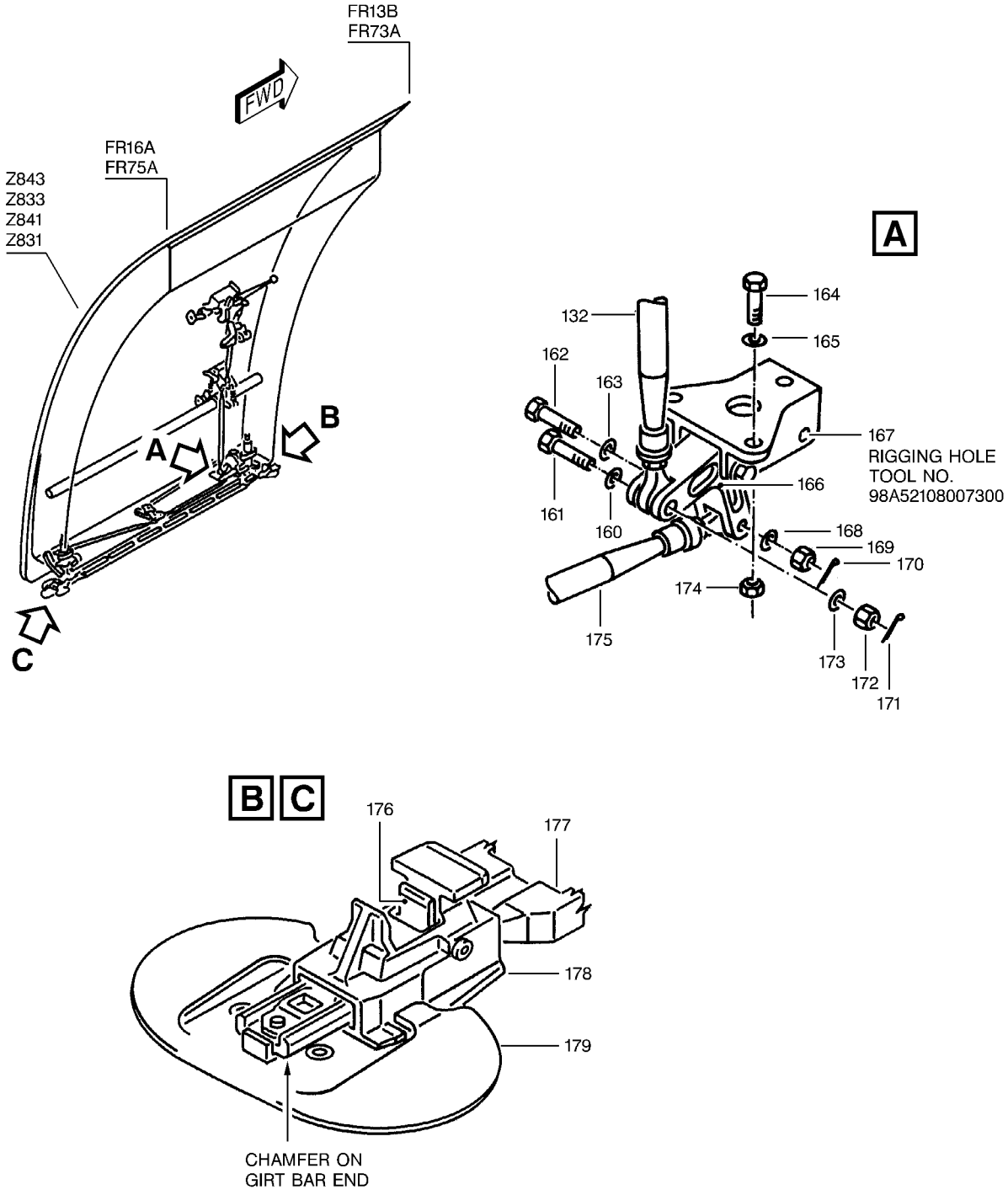
(c)Disconnect spring assy (135) by removing cotter pin (139), washer (138) and pin (128).
(d)Remove guide strut (136) by removing cotter pin (141), nut (140), washers (142),(126) and bolt (127).
NOTE : Record fully retracted length of guide strut (136).
(e)Remove spring rod (137) as follows:
CAUTION : SPRING ROD (137) IS LOADED.
1 Remove cotter pin (123), nut (124) and washer (125).
2 Compress spring rod (137) and remove bolt (144) and washer (143).
(f)Remove nuts (115) and bolts (116).
(g)Remove locking unit (117).

** ON AFT PASSENGER/CREW DOORS

(c)Unhook spring (150).
(d)Remove guide strut (136) by removing cotter pin (141), nut (140), washers (142),(126) and bolt (127).
(e)Remove spring rod (137) as follows:
CAUTION : SPRING ROD (137) IS LOADED.
1 Remove cotter pin (123), nut (124) and washer (125).
2 Compress spring rod (137) and remove bolt (144) and washer (143).
(f)Remove nuts (115), washers (114) and bolts (116).
(g)Remove locking unit (117).

** ON FWD AND AFT PASSENGER/CREW DOORS

(4)Bellcrank Unit (Lateral)
(Ref. Fig. 406)
(a)Disconnect rod (132) by removing cotter pin (171), nut (172), washers (173),(160) and bolt (161).
(b)Disconnect rod (175) by removing cotter pin (170), nut (169), washers (168),(163) and bolt (162).
(c)Remove nuts (174), bolts (164) and washers (165).
(d)Remove bellcrank unit (166).
(5)Sliders and Girt Bar (Ref. Fig. 406)
(a)Close door.
(b)Set emergency control handle to fully forward position.
(c)Open door.
(d)Press hooks (176) to free the sliders (178) and push the sliders (178) inward until disengaged from girt bar fittings (179).
(e)Slightly lift girt bar (177) and sliders (178).
(f)Press hooks (176) to free the sliders (178) and push sliders (178) toward the ends of girt bar (177).
(g)Remove sliders (178) and girt bar (177).
(h)Set emergency control handle to fully aft position.



BM6 52 10 30 4 ALM0 01

Bellcrank Unit (Lateral) and Sliders with Girt Bar
Figure 406

R

(6)Bellcrank Unit (Middle)
(Ref. Fig. 407)
(a)Disconnect rod (195) by removing cotter pin (206), nut (207), washers (208),(187) and bolt (188).
(b)Disconnect rod (175) by removing cotter pin (199), nut (198), washers (197),(194) and bolt (193).
(c)Disconnect rod (209) by removing cotter pin (202), nut (201), washers (200),(192) and bolt (191).

** ON FWD PASSENGER/CREW DOORS

(d)Remove cotter pin (203), nut (204) and washer (205).
(e)Remove bolt (190) and washer (189).
(f)Remove bellcrank unit (185) and separate shims (186).

** ON AFT PASSENGER/CREW DOORS

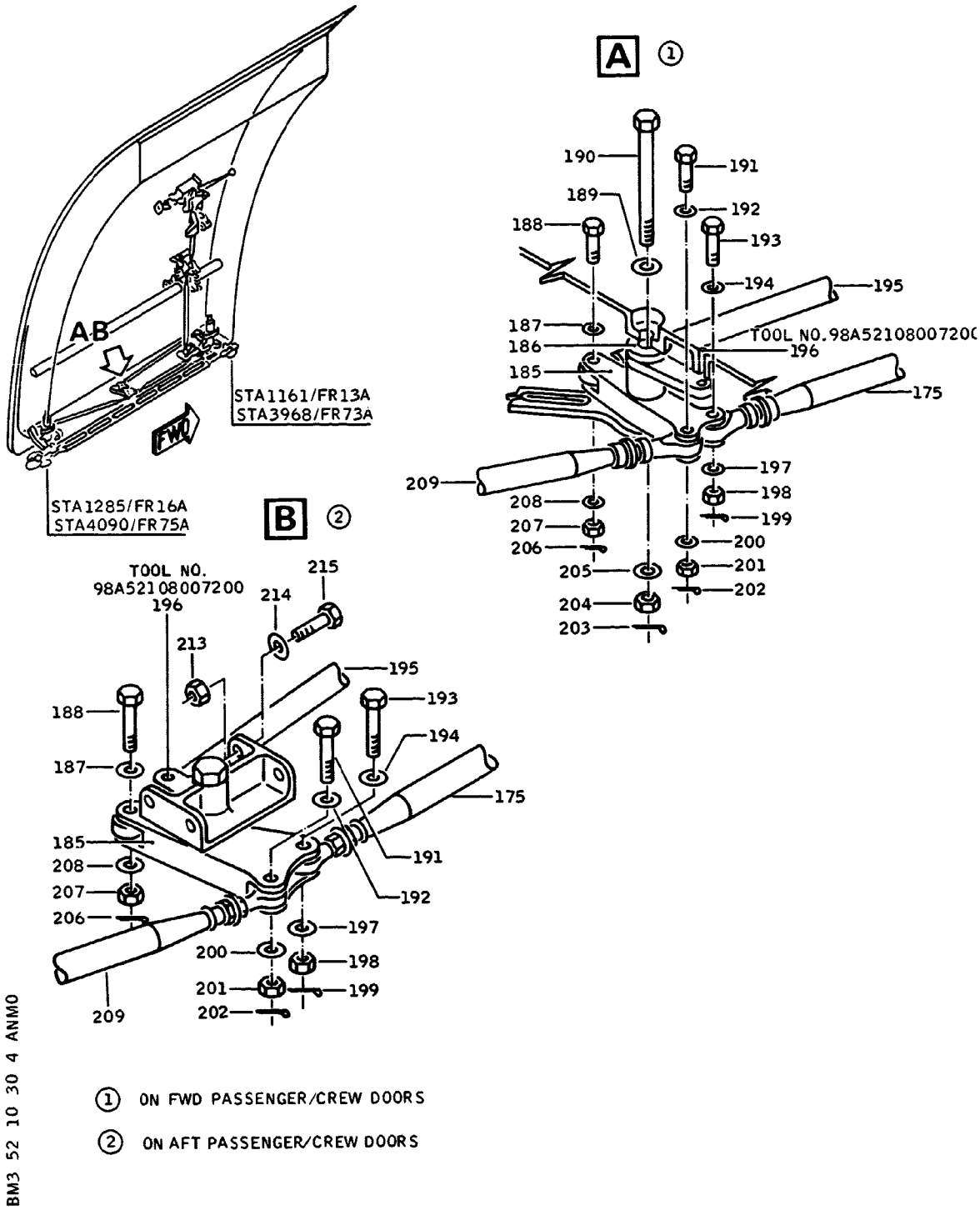
(d)Remove nuts (213), bolts (215) and washers (214).
(e)Remove bellcrank unit (185).

** ON FWD AND AFT PASSENGER DOORS

(7)Linkage Guide
(Ref. Fig. 406)
(Ref. Fig. 408)
(a)Connect girt bar (177) to floor as follows:
1 Close door.
2 Set emergency control handle to fully forward position.
3 Open door.
(b)Disconnect rod (209) with cotter pin (215), nut (216), washers (217),(218) and bolt (219).
(c)Remove cotter pin (222), nut (223), washers (224),(231) and bolt (230).
(d)Remove cotter pin (225), nut (226) and washer (227).
(e)Remove bolts (220), washers (221) and nuts (235).
(f)Pull out bolt (233) as far as possible and remove linkage guide (236) with yoke (229).
(g)Remove spacer (234) and yoke (229) from linkage guide (236).
(h)Remove spacer (228), bolt (233) and washer (232) from yoke (229).

** ON DOOR SERIAL NOS. 1201, 1224-1241

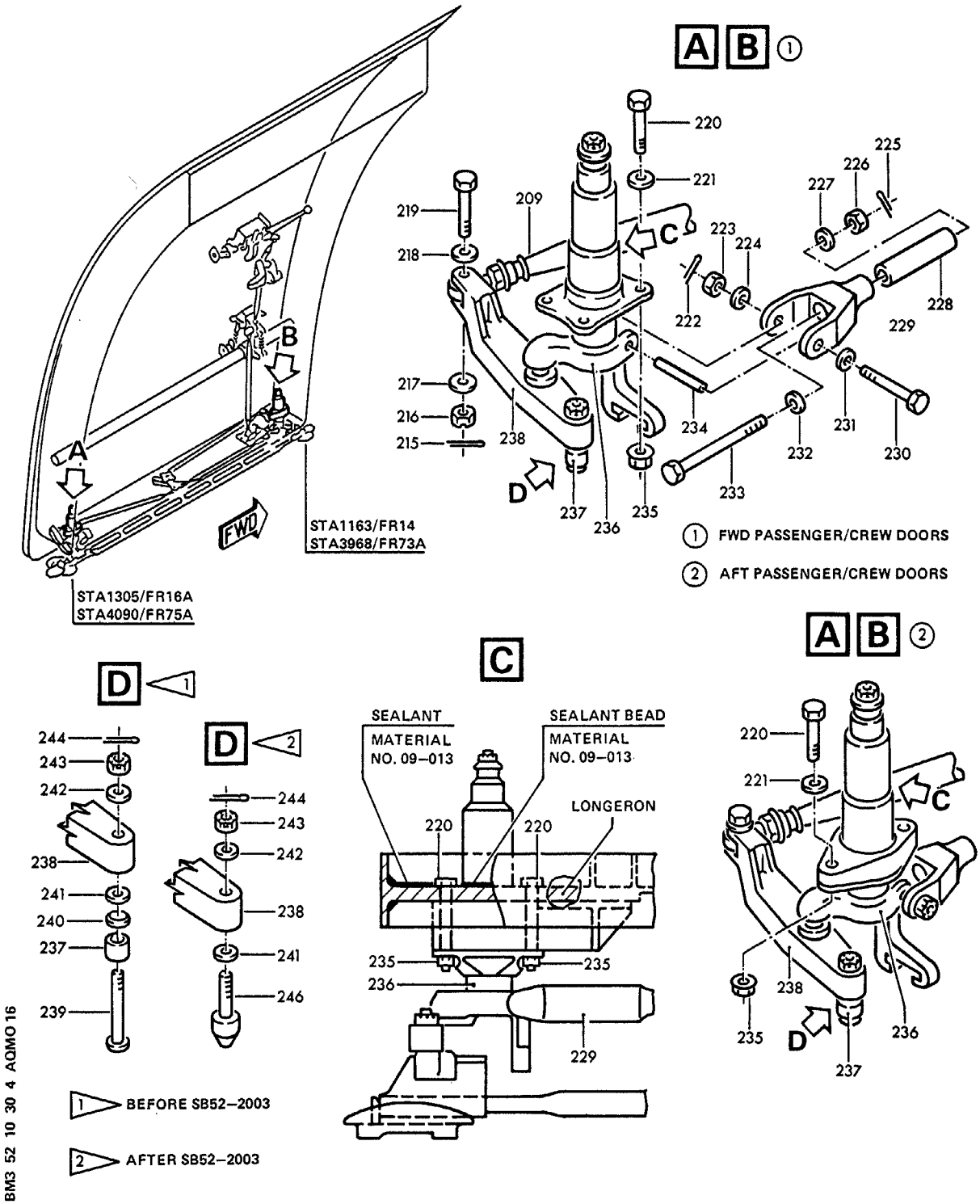
(j)Remove roller (237) from bellcrank (238) as follows:
1 Remove cotter pin (244), nut (243) and washer (242).
2 Remove bolt (239), roller (237) and washers (240),(241).
3 Remove roller (237) from bolt (239).



① ON FWD PASSENGER/CREW DOORS

② ON AFT PASSENGER/CREW DOORS

Bellcrank Unit (Middle)
Figure 407



Linkage Guide
Figure 408

** ON DOOR SERIAL NO. 1162, 1172, 1191, 1245 AND SUBSEQUENT

AFTER SB 52-2003 ON DOOR SERIAL NOS. 1201, 1224-1241

(j)Remove conical pin (246) from bellcrank (238) as follows:

1 Remove cotter pin (244), nut (243) and washer (242).

2 Remove conical pin (246) and washer (241).

** ON DOOR SERIAL NOS. 1245 AND SUBSEQUENT

(8)Blanking Device

(Ref. Fig. 409)

(a)Close door.

(b)Remove safety pin (250) for emergency control handle and set emergency control handle to fully forward position.

(c)Remove nut (257), washer (256) and bolt (254).

(d)Remove cotter pin (258) and washer (259).

(e)Remove adhesive foil (252) from tube assy (260) and then pin (251).

(f)Remove lever (253) and spring (255).

(g)Set emergency control handle to fully aft position and insert safety pin (250).

** ON DOOR SERIAL NOS. ALL

C. Preparation of Replacement Component

(1)Lightly grease all attachment holes, bolts and threads with grease (Material No. 04-004).

(2)Make sure that rigging holes are free of paint and rigging pin can be inserted smoothly.

(3)Clean girt bar sliders and fittings with cleaning agent (Material No. 11-004).

R (4)Apply grease (Material No. 04-022) to girt bar ends at slider positions.

(5)Apply a light coat of protective film (Material No. 05-027) to girt bar sliders and fittings.

(6)Ensure girt bar drainage holes in each recess are clean and free from obstructions.

D. Installation

(1)Release Mechanism and Emergency Control Handle

(Ref. Fig. 401)

(a)Position roller assy (26) with spacer (25), bolt (23) and washers (24),(27) to lever (1).

(b)Install washer (28) and nut (29).

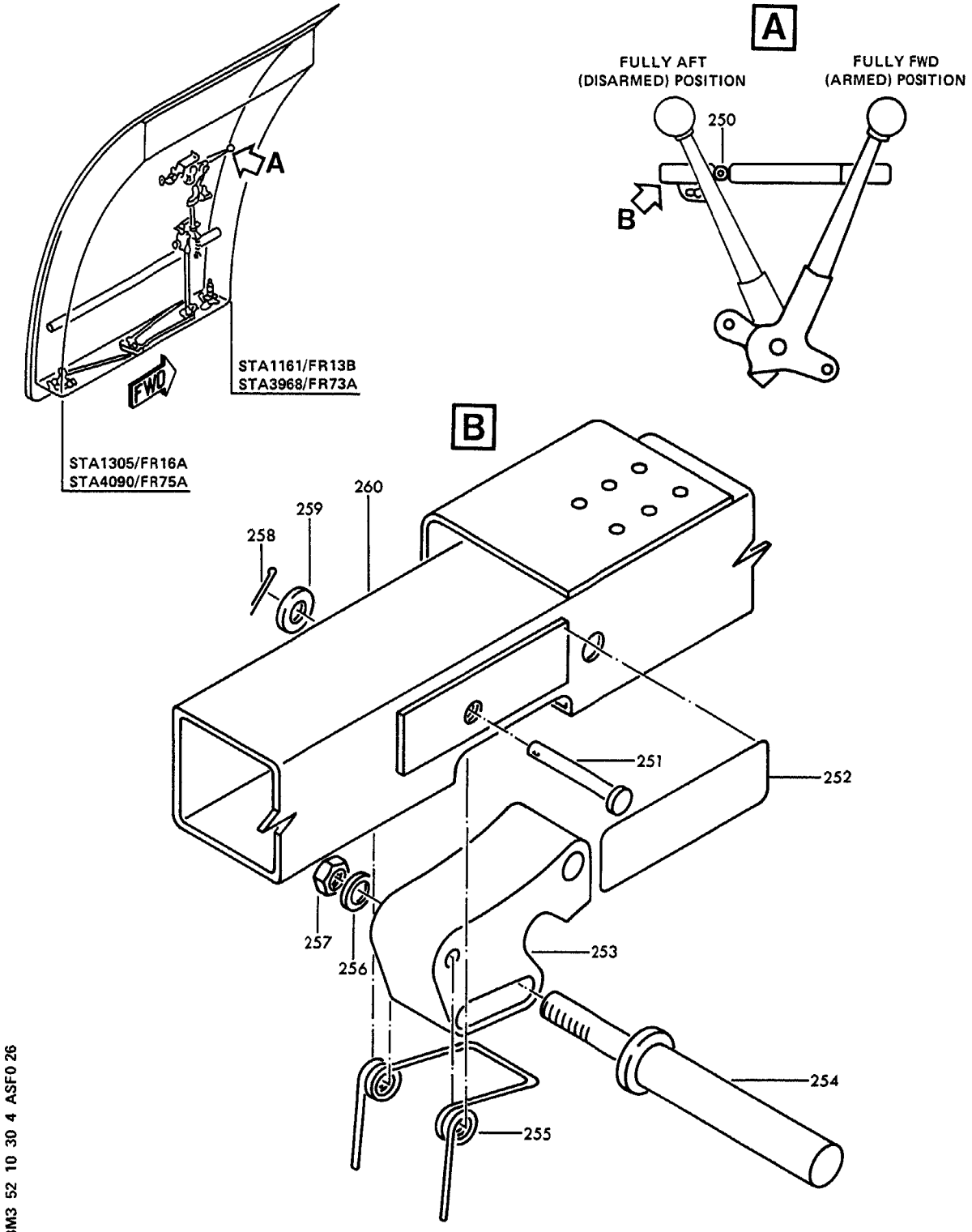
(c)TORQUE nut (29) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.

(d)Install cotter pin (30).

(e)Replace O-ring (21).

(f)Position release mechanism and emergency control handle in door structure and install bolts (22) with washers (20) and nuts (19) and hand-tighten.

(g)Insert bracket (6) and plate (7) and install bolts (8), washers (9) and nuts (10) and hand-tighten.



Blanking Device - Emergency Control Handle
Figure 409

(h)Install bolts (5), washers (11) and nuts (12) and hand-tighten.
(i)Install bolts (2), washers (3) and nut (4).
(j)TORQUE nuts (19) to between 0.35 and 0.45 m.daN (31 and 40 lbf.in.).
(k)TORQUE nuts (4),(10),(12) to between 0.6 and 0.8 m.daN (53 and 71 lbf.in.).
(l)Install rod (18) using bolt (17), washers (16),(15) and nut (14).
(m)TORQUE nut (14) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(n)Install cotter pin (13).
(o)Install exterior control handle (Ref. 52-11-21, P. Block 401). (Ref. 52-13-21, P. Block 401).
(p)Check gap between emergency control handle stop and adjust if necessary (Ref. 52-10-30, P. Block 501).

(2)Stop Lever and Bellcrank Unit
On FWD Passenger/Crew Doors (Ref. Fig. 402)
On AFT Passenger/Crew Doors (Ref. Fig. 403)

** ON FWD PASSENGER/CREW DOORS

(a)Position bellcrank (46) with fitting (60) and install bolts (61), washers (59) and nuts (58).
(b)Install stop lever (40) and bellcrank (41) to bellcrank (46).
(c)Install and tighten nut (50) and secure with cotter pin (51).
(d)Install bolt (42), washer (62) and nut (63).
(e)Tighten nut (63) and secure with cotter pin (64).
(f)TORQUE nuts (58) to between 0.35 and 0.45 m.daN (31 and 40 lbf.in.).

** ON AFT PASSENGER/CREW DOORS

(a)Position bellcrank (46) with fitting (60) and install bolts (61) and nuts (58).
(b)TORQUE nuts (58) to between 0.5 and 0.6 m.daN (44 and 53 lbf.in.).
(c)Position stop lever (40) with yoke (80) to bellcrank (46) and bolt (79).
(d)Install washers (70),(71) and nut (72).
(e)Install bolt (78), washers (77),(76) and nut (75).
(f)TORQUE nut (75) to max. 0,35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(g)Install cotter pin (74).
(h)Tighten nut (72) and secure with cotter pin (73).

** ON FWD AND AFT PASSENGER/CREW DOORS

(i)Insert rigging pin (65) in bellcrank (46) and fitting (60).
(j)Install rod (20) using bolt (49), washers (48),(45) and nut (44).

(k)TORQUE nut (44) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(l)Install cotter pin (43).
(m)Install rod (54) using bolt (52), washers (53),(55) and nut (56).
(n)TORQUE nut (56) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(o)Install cotter pin (57).
(p)Check adjustment of rods (20),(54) (Ref. 52-10-30, P. Block 501).
(q)Remove rigging pin (65).
(r)Check emergency release mechanism distance between release lever from door damper and emergency operation cylinder and stop lever, and adjust if necessary (Ref. 52-10-14, P. Block 501).
(s)Install limit switch (Ref. 52-73-13, P. Block 401).
(t)Connect electrical connector (47) to limit switch.
(u)Adjust limit switch (Ref. 52-73-13, P. Block 501).

(3)Locking Unit

On FWD Passenger/Crew Doors (Ref. Fig. 404)
On AFT Passenger/Crew Doors (Ref. Fig. 405)

(a)Position locking unit (117) in door structure.

** ON FWD PASSENGER/CREW DOORS

(b)Install bolts (116) and nuts (115) and TORQUE nuts (115) to between 0.6 and 0.8 m.daN (53 and 71 lbf.in.).

** ON AFT PASSENGER/CREW DOORS

(b)Install bolts (116), washers (114) and nuts (115) and TORQUE nuts (115) to between 0.6 and 0.8 m.daN (53 and 71 lbf.in.).

** ON FWD AND AFT PASSENGER/CREW DOORS

R (c)Install spring rod (137) with drain hole at bottom using bolt (144),
R washers (143),(125) and nut (124).
(d)TORQUE nut (124) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(e)Install cotter pin (123).
(f)Install guide strut (136) as follows:
1 Apply grease (Material No. 04-004) to sliding parts of guide strut (136).
2 Locate guide strut (136) and connect using bolt (127), washers (126),(142) and nut (140).
NOTE : Set fully retracted length of guide strut (136) to dimension recorded during removal (step 3.B.(3)(d).
(g)TORQUE nut (140) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(h)Install cotter pin (141).

** ON FWD PASSENGER/CREW DOORS

(i)Connect spring assy (135) using pin (128), washer (138) and cotter pin (139).

** ON AFT PASSENGER/CREW DOORS

(i)Connect spring (150).

** ON FWD AND AFT PASSENGER/CREW DOORS

(j)Insert rigging pin (110) in locking unit (117).
(k)Install rod (54) using bolt (118), washers (119),(120) and nut (121).
(l)TORQUE nut (121) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(m)Install cotter pin (122).
(n)Install rod (132) using bolt (134), washers (133),(129) and nut (130).
(o)TORQUE nut (130) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(p)Install cotter pin (131).
(q)Check adjustment of rods (54),(132) (Ref. 52-10-30, P. Block 501).
(r)Remove rigging pin (110) from locking unit (117).

(4)Bellcrank Unit (Lateral) (Ref. Fig. 406)
(a)Position bellcrank unit (166) to door structure.
(b)Install bolts (164), washers (165) and nuts (174).
(c)TORQUE nuts (174) to between 0.6 and 0.8 m.daN (53 and 71 lbf.in.).
(d)Insert rigging pin (167) in bellcrank unit (166).
(e)Install rod (132) using bolt (161), washers (160),(173) and nut (172).
(f)TORQUE nut (172) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(g)Install cotter pin (171).
(h)Install rod (175) using bolt (162), washers (163),(168) and nut (169).
(i)TORQUE nut (169) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(j)Install cotter pin (170).
(k)Check adjustment of rods (132),(175) (Ref. 52-10-30, P. Block 501).

(5)Sliders and Girt Bar (Ref. Fig. 406, 408)
R (a)Put the girt bar (177) in its correct position at the sliders (178).

R NOTE : The chamfer on the girt bar ends must be at the bottom of the
R girt bar (177).

R (b)Press hooks (176) and fully engage sliders (178) on girt bar (177).
R (c)Move girt bar (177) with sliders (178) in girt bar fittings (179).
R (d)Press hooks (176) and push sliders (178) in girt bar fittings (179).
R (e)Set emergency control handle to 'ARMED (fully forward position).
R (f)Close door slowly and ensure that roller (237) of linkage guide (236) engages the sliders (178) correctly.
R (g)Set emergency control handle to 'DISARMED' (fully aft position) and open door slowly - girt bar (177) must be connected to door.
R (h)If operation is not correct, ref. 52-10-30, P. Block 501.

(6)Bellcrank Unit (Middle) (Ref. Fig. 407)

** ON FWD PASSENGER/CREW DOORS

(a)Position bellcrank unit (185) with shims (186) and install bolt (190), washers (189,205) and nut (204).
(b)TORQUE nut (204) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(c)Install cotter pin (203).

** ON AFT PASSENGER/CREW DOORS

(a)Position bellcrank unit (185) and install bolts (215), washers (214) and nuts (213).
(b)TORQUE nuts (213) to between 0.5 and 0.6 m.daN (44 and 53 lbf.in.).

** ON FWD AND AFT PASSENGER/CREW DOORS

(d)Insert rigging pin (196) in bellcrank unit (185).
(e)Install rod (195) using bolt (188), washers (187),(208) and nut (207).
(f)TORQUE nut (207) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(g)Install cotter pin (206).
(h)Install rod (175) using bolt (193), washers (194),(197) and nut (198).
(i)TORQUE nut (198) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(j)Install cotter pin (199).
(k)Install rod (209) using bolt (191), washers (192),(200) and nut (201).
(l)TORQUE nut (201) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(m)Install cotter pin (202).
(n)Check adjustment of rods (195),(175),(209) (Ref. 52-10-30, P. Block 501).
(o)Remove rigging pin (196) from bellcrank unit (185).

(7)Linkage Guide (Ref. Fig. 406, 407, 408)
(a)Insert bolt (233) with washer (232) in yoke (229).
(b)Install yoke (229) using spacer (228), washer (227) and nut (226).
(c)Position linkage guide (236) in door structure and connect to yoke (229) using spacer (234), bolt (230), washers (231),(224) and nut (223).
(d)Install bolts (220), washers (221) and nuts (235).
(e)TORQUE nuts (235) to between 0.6 and 0.8 m.daN (53 and 71 lbf.in.).
(f)TORQUE nuts (226),(223) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(g)Install cotter pins (225),(222).
(h)Insert rigging pin (196) in bellcrank unit (185).
(i)Install rod (209) using bolt (219), washer (218),(217) and nut (216).
(j)TORQUE nut (216) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(k)Install cotter pin (215).

(l)Apply bead of sealant (Material No. 09-013) at connection of linkage guide (236) and door structure.
(m)Make certain that sealant (Material No. 09-013) blanking drain holes in end pockets of door structure longeron is complete. Renew as necessary.

** ON DOOR SERIAL NOS. 1201, 1224-1241

(n)Install roller (237) as follows:
1 Assemble bolt (239) with roller (237) and washers (240),(241) and insert in bellcrank (238).
2 Install washer (242) and nut (243).
3 TORQUE nut (243) to max. 0.65 m.daN (58 lbf.in.) and back off to next cotter pin hole.
4 Install cotter pin (244).

** ON DOOR SERIAL NO. 1162, 1172, 1191, 1245 AND SUBSEQUENT
AFTER SB 52-2003 ON DOOR SERIAL NOS. 1201, 1224-1241

(n)Install conical pin (246) as follows:
1 Assemble washer (241) on conical pin (246) and insert in bellcrank (238).
2 Install washer (242) and nut (243).
3 TORQUE nut (243) to max 0.65 m.daN (58 lbf.in.) and back off to next cotter pin hole.
4 Install cotter pin (244).

** ON DOOR SERIAL NOS. ALL

(o)Remove rigging pin (196) from bellcrank unit (185).
(p)Close door slowly and check that roller (237) of linkage guide (236) is fully engaged in sliders (178).
(q)Set emergency control handle to fully aft position.
(r)Open door.
(s)If necessary adjust rod (209) (Ref. 52-10-30, P. Block 501).

** ON DOOR SERIAL NOS. 1247 AND SUBSEQUENT

(8)Blanking Device (Ref. Fig. 409)
(a)Close door.
(b)Make certain that safety pin (250) is removed and emergency control handle is set to fully forward position.
(c)Insert lever (253) and spring (255) in tube assy (260).
(d)Install pin (251) thru tube assy (260), lever (253) and spring (255).

(e)Install washer (259) and cotter pin (258).
(f)Set emergency control handle to fully aft position and move lever (253) by hand to insert safety pin (250).
(g)Install bolt (254), washer (256) and nut (257) and adjust bolt (254) until it contacts emergency control handle.
(h)Tighten nut (257).
(i)Install adhesive foil (252) to tube assy (260).

** ON DOOR SERIAL NOS. ALL

E. Test
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
(3)Close door.
(4)Set emergency control handle to fully forward position and then to fully aft position and check:
(a)that force required to operate emergency control handle does not exceed 10 daN (22 lbf.),
(b)free movement of emergency control handle,
(c)engagement of sliders in girt bar fittings.
(5)With emergency control handle in fully aft position insert safety pin.
(6)Open door.
(7)For any adjustment refer to 52-10-30, P. Block 501).
(8)Carry out test of door warning system (Ref. 52-71-11, P. Block 501).
(9)Carry out test of emergency escape slide release warning (Ref. 52-73-13, P. Block 501).

D. Close-Up
(1)Coat projecting thread ends and bolt heads as follows:
(a)For bolts attaching parts directly to door structure use polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
(b)For bolts in mechanism use Mastinox (Material No. 05-002).
R (2)Apply grease (Material No. 04-022) to girt bar ends.
(3)Apply grease (Material No. 04-017) to contact surfaces of girt bar and sliders.
(4)Apply corrosion-preventive compound (Material No. 05-005) thinly to all unpainted steel parts.
(5)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(6)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(7)Make certain that drain holes are clean and free from obstructions.
(8)Install door lining and insulation (Ref. 52-10-13, P. Block 401).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(9)Arm emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(10)Remove access platform.

FWD, AFT EMERGENCY ESCAPE SLIDE RELEASE MECHANISM - ADJUSTMENT/TEST

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. Block 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Reason for the Job

To make certain that emergency escape slide release mechanism is operable.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B. 98A52108003001	Safety Pin Set - Emergency Control Handle
C. 98A52108007001	Tool Set - R/I MID and AFT Passenger/Crew Doors
D. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
or 98A52108008001	Support Frame - Ballast Weight, Doors **NOTE** : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
E.	Measuring Tools
R F. Material No. 04-022	Common Greases (Ref. 20-31-00)
G. Material No. 05-002	Special Materials (Ref. 20-31-00)
H. Material No. 05-005	Special Materials (Ref. 20-31-00)
J. Material No. 05-027	Special Materials (Ref. 20-31-00)
K. Material No. 08-074	Masking Tape (Ref. 20-31-00)
L. Material No. 16-001	Structure Paints (Ref. 20-31-00)
M. Material No. 16-002	Structure Paints (Ref. 20-31-00)
N. Material No. 19-010	Lockwire, Stainless Steel Annealed 0.8 mm dia (Ref. 20-31-00)
Referenced Procedures	
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-73-13, P. Block 501	Limit Switch

3. Procedure

A. Job Set-up

(1)Position access platform in position of the applicable passenger/

crew door (referred to as door).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

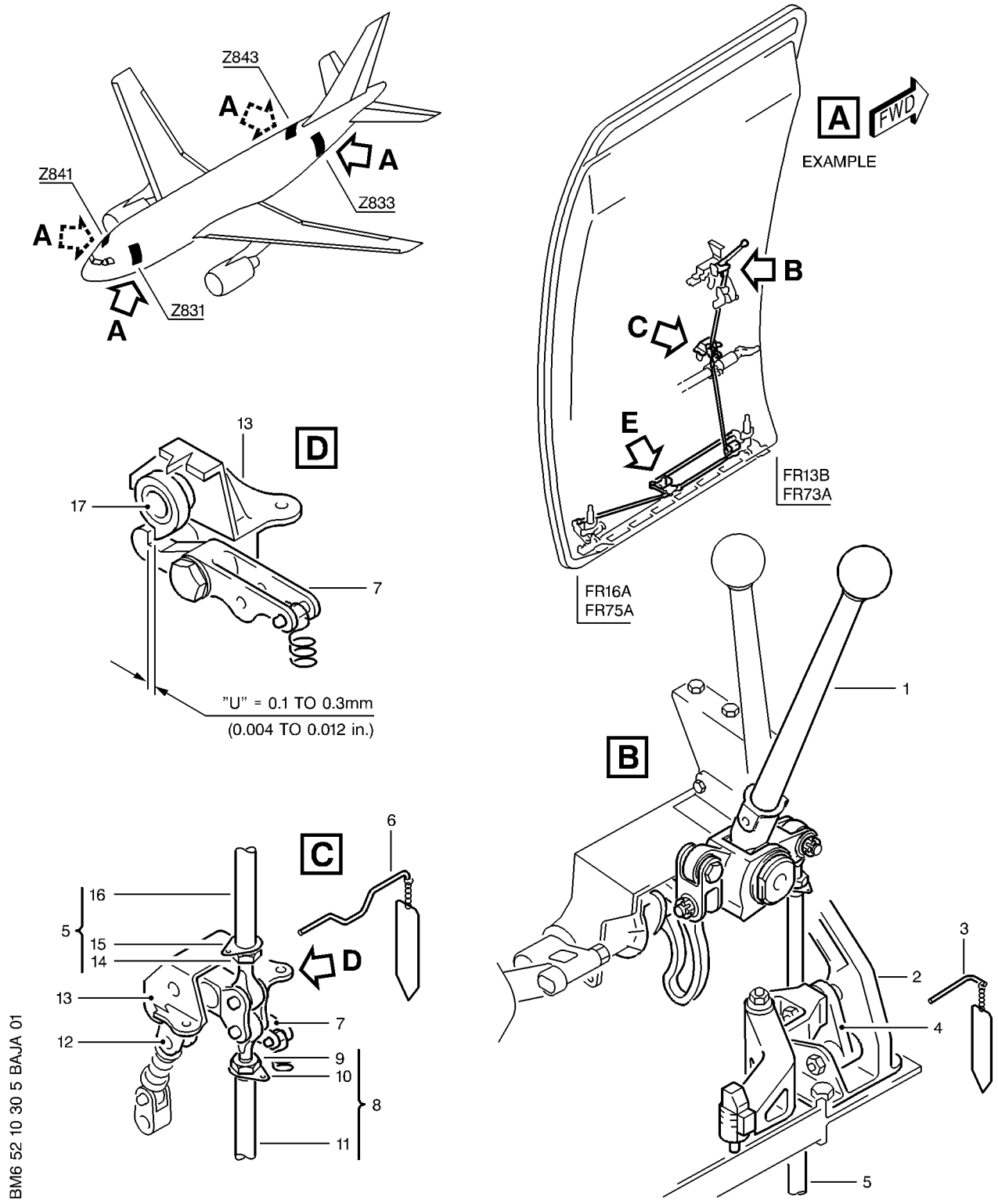
(2)Do the special precautions before you start work on the door (Ref. 52-10-00, P. Block 301).
(3)Remove the dual escape slide assembly (Ref. 25-61-21, P. Block 401) or the slide raft assembly (Ref. 25-61-22, P. Block 401).
(4)Remove the door lining and insulation (Ref. 52-10-13, P.Block 401).
(5)Install ballast weight assy PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.

B. Adjustment of the Linkage Mechanism
(Ref. Fig. 501)
(Ref. Fig. 501)

R (1)Close the door and move the inboard lever down to lower the door.
(2)Remove the safety pin (63).
(3)Move the emergency control handle (1) to the "ARMED" (fully forward) position.
(4)Remove the nut (62), stop bolt (60) and shim washer (61) from the lever (53).
(5)Put the rigging pin (3) into the rigging holes of the bellcrank bracket (2) and the bellcrank lever (4).
(6)If necessary, operate the emergency control handle (1) to make sure that the rigging pin (3) moves into the rigging holes freely.
(7)Put the rigging pin (6) into the rigging holes of the lever housing (13) and the twin lever (12).
(8)Make sure that the rigging pin (6) moves into the rigging holes freely.
(9)If you cannot install the rigging pin (6) freely, do the subsequent adjustment of the control rod (5):
(a)Cut, remove and discard the lockwire from the safety devices (15) and the locknuts (14).
(b)Loosen the locknuts (14).
(c)Turn the barrel (16) until you can install the rigging pin (6) freely.
(d)Put a strand of lockwire (Material No. 19-010) into the inspection holes of the barrel (16) (to examine for correct installation and adjustment) of the control rod (5).

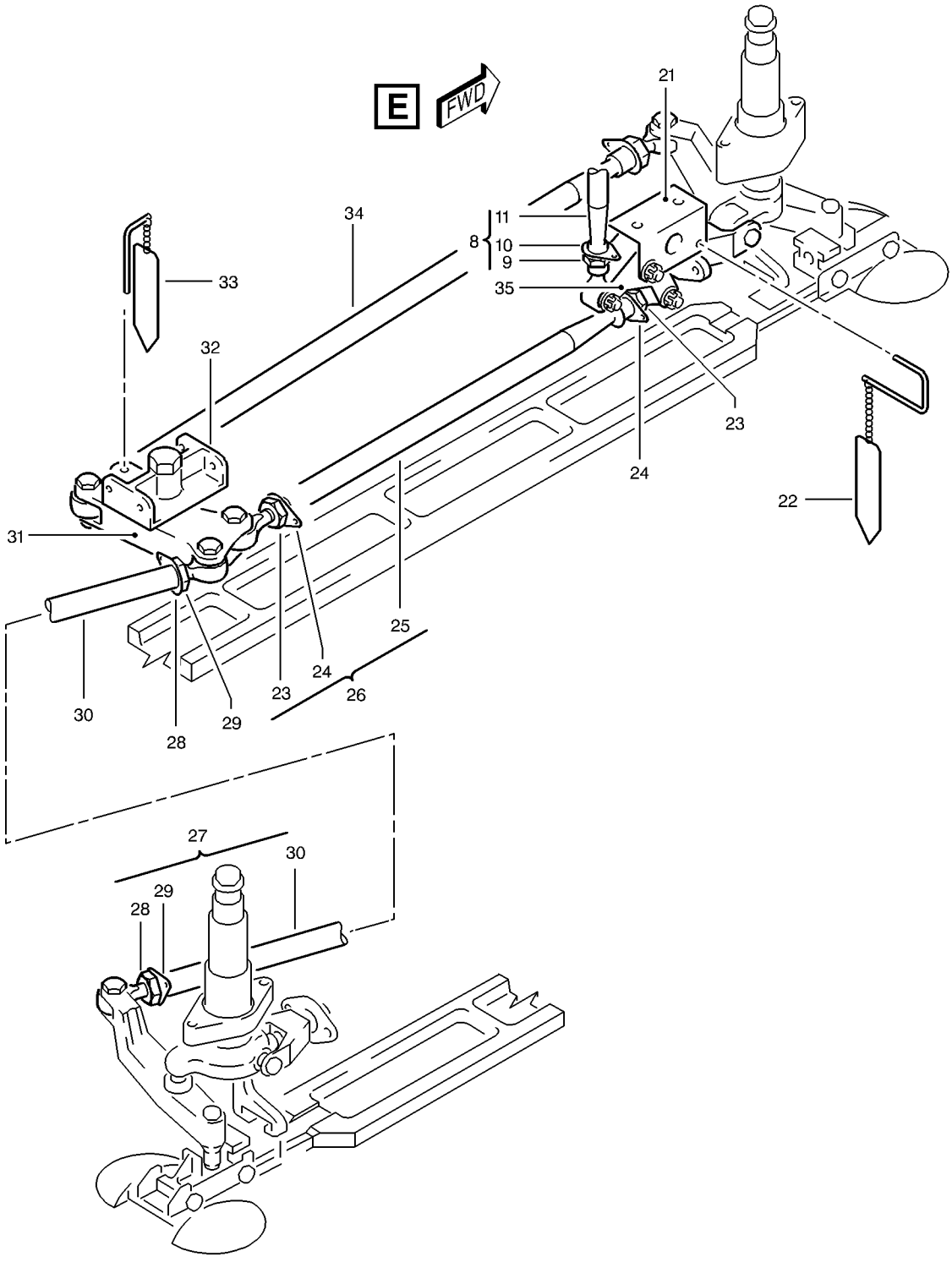
NOTE : If the strand of lockwire (Material No. 19-010) goes through the barrel (16), you must do the adjustment procedure again until it is correct.

(e)Tighten the locknuts (14).
(f)Safety the locknuts (14) to the safety devices (15) with lockwire (Material No. 19-010).
(10)Put the rigging pin (22) into the rigging holes of the support fitting (21) and the bellcrank lever (35).
(11)Make sure that the rigging pin (22) moves into the rigging holes freely.
(12)If you cannot install the rigging pin (22) freely, do the subsequent adjustment of the actuation rod (8).
(a)Cut, remove and discard the lockwire from the safety devices (10) and



Adjustment of the Linkage Rods on FWD and AFT PAX Door
(Sheet 1 of 2)
Figure 501

R



BM6 52 10 30 5 BAJM 01

Adjustment of the Linkage Rods on FWD and AFT PAX Door
(Sheet 2 of 2)
Figure 501

R

the locknuts (9).
(b)Loosen the locknuts (9).
(c)Turn the barrel (11) until you can install the rigging pin (22) freely.
(d)Put a strand of lockwire (Material No. 19-010) into the inspection holes of the barrel (11) (to examine for correct installation and adjustment) of the actuation rod (8).

NOTE : If the strand of lockwire (Material No. 19-010) goes through the barrel (11), you must do the adjustment procedure again until it is correct.

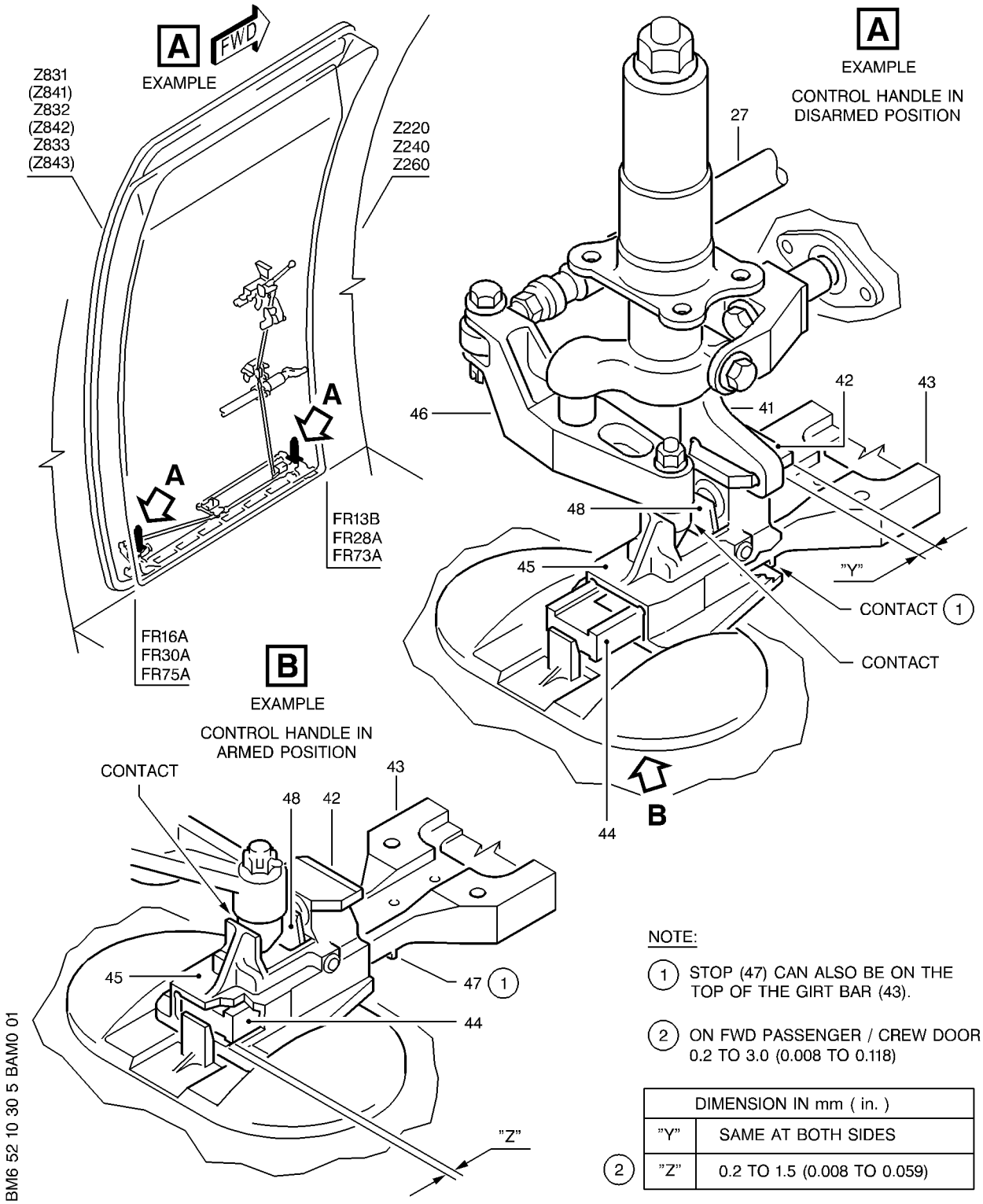
(e)Tighten the locknuts (9).
(f)Safety the locknuts (9) to the safety devices (10) with lockwire (Material No. 19-010).
(13)Put the rigging pin (33) into the rigging holes of the bearing fitting (32) and the double lever (31).
(14)Make sure that the rigging pin (33) moves into the rigging pin holes freely.
(15)If you cannot install the rigging pin (33) freely, do the subsequent adjustment of the connection rod (26).
(a)Make sure that the rigging pin (22) is installed.
(b)Cut, remove and discard the lockwire from the safety devices (24) and the locknuts (23).
(c)Loosen the locknuts (23).
(d)Turn the barrel (25) until you can install the rigging pin (33) freely.
(e)Put a strand of lockwire (Material No. 19-010) into the inspection holes of the barrel (25) (to examine for correct installation and adjustment) of the connection rod (26).

NOTE : If the strand of lockwire (Material No. 19-010) goes through the barrel (25), you must do the adjustment procedure again until it is correct.

(f)Tighten the locknuts (23).
(g)Safety the locknuts (23) to the safety devices (24) with lockwire (Material No. 19-010).
(16)Remove the rigging pins (3), (6), (22) and (33).

C. Adjustment of the Girt Bar Assembly

R (Ref. Fig. 502)
(1)Move the emergency control handle (1) to the "DISARMED" (fully aft) position.
(2)Move the inboard lever up to lift the door.
(3)Make sure that the sliding surfaces of the sliders (45) and the girt bar (43) are lubricated with grease (Mat. No. 04-004).
(4)Make sure that the pins of the guide arms (46) touch the pawls (48).
(5)Make sure that the sliders (45) touch the stops (47) of the girt bar (43).
(6)If the pins do not touch the pawls (48) or the sliders do not touch the stops (47), do the subsequent adjustments: (Ref. Fig. 501) (Sheet 2/2).



NOTE:

(1) STOP (47) CAN ALSO BE ON THE TOP OF THE GIRT BAR (43).

(2) ON FWD PASSENGER / CREW DOOR 0.2 TO 3.0 (0.008 TO 0.118)

DIMENSION IN mm (in.)	
"Y"	SAME AT BOTH SIDES
(2) "Z"	0.2 TO 1.5 (0.008 TO 0.059)

BM6 52 10 30 5 BAM0 01

Adjustment of the Girt Bar Assembly
Blanking Device
Figure 502

R

NOTE : The adjustment of the rear girt-bar rod (34) and the forward girt-bar rod (27) is the same. Therefore only the adjustment of the forward girt-bar rod (27) is given.

(a)Cut, remove and discard the lockwire from the safety devices (29) and the locknuts (28).
(b)Loosen the locknuts (28).
(c)Turn the barrel (30) until the pins of the guide arms (46) touch the pawls (48) and the sliders (45) touch the stops (47).
(d)Measure the overlap "Y" from the slider surface (42) to the guide fitting (41).
(e)Make sure that the overlap "Y" is equal for the forward and the aft end of the girt bar (43).
(f)If the overlaps "Y" are not equal, turn the barrel (30) to adjust the length of the forward or the rear girt-bar rod (27) or (34) as necessary.

NOTE : If you decrease (extend) the length of one girt-bar rod, you must also extend (decrease) the length of the other. The adjustment of the forward and the aft girt-bar rods (27) and (34) must be equal but opposite in direction.

(g)Put a strand of lockwire (Material No. 19-010) into the inspection holes of the barrel (30) (to examine for correct installation and adjustment) of the girt-bar rods (27) and (34).

NOTE : If the strand of lockwire (Material No. 19-010) goes through the barrel (30), you must do the adjustment procedure again until it is correct.

(h)Tighten the locknuts (28).
(j)Safety the locknuts (28) to the safety devices (29) with lockwire (Material No. 19-010).
(7)Move the inboard lever down to lower the door.
(8)Make a reference mark on the girt bar (43) and on the adjacent floor panel with adhesive tape (Mat. No. 08-074).

NOTE : The reference marks show the center position of the girt bar (43). This position is necessary as a datum for further adjustment in the "ARMED" condition.

(9)Move the emergency control handle (1) to the "ARMED" (fully forward) position.
(10)Put the rigging pin (22) through the rigging holes of the support fitting (21) and the bellcrank lever (35).
(11)Make sure that the rigging pin (22) moves into the rigging pin holes freely.
(12)Put the rigging pin (33) through the rigging holes at the bearing fitting (32) and the double lever (31).
(13)Make sure that the rigging pin (33) moves into the rigging pin holes freely.

(14)Make sure that the reference mark on the girt bar (43) aligns with the reference mark on the adjacent floor panel.

NOTE : If necesssary, move the girt bar (43) to align the reference marks.

(15)Make sure that the sliders (45) touch the pins of the guide arms (46).

NOTE : If necessary, push the sliders (45) against the pins of the guide arms (46).

** ON FWD PASSENGER/CREW DOOR

(16)Measure the offset dimension "Z" as follows:
(a)Measure the offset dimension "Z" between each of the sliders (45) and the adjacent end (44) of the girt bar (43).
(b)Make sure that the offset dimension "Z" is between 0.2 and 3.0 mm (0.0078 and 0.118 in.).

** ON AFT PASSENGER/CREW DOOR

(16)Measure the offset dimension "Z" as follows:
(a)Measure the offset dimension "Z" between each of the sliders (45) and the adjacent end (44) of the girt bar (43).
(b)Make sure that the offset dimension "Z" is between 0.2 and 1.5 mm (0.0078 and 0.0590 in.).

** ON FWD AND AFT PASSENGER/CREW DOORS

(17)If the offset dimension "Z" is not correct, do the subsequent adjustment:

NOTE : The adjustment of the rear girt-bar rod (34) and the forward girt bar rod (27) is the same. Therefore, only the adjustment of the forward girt-bar rod (27) is given.

(a)Hold the girt bar (43) so that the reference marks align.
(b)Cut, remove and discard the lockwire from the safety devices (29) and the locknuts (28).
(c)Loosen the locknuts (28).
(d)Turn the barrel (30) until the offset dimension "Z" is correct.

NOTE : If you decrease (extend) the length of one girt bar rod, you must also extend (decrease the length of the other. The adjustment of the forward and the aft girt bar rods (27) and (34) must be equal but opposite in direction.

(e)Put a strand of lockwire (Material No. 19-010) into the inspection holes of the barrel (30) (to examine for correct installation and adjustment) of the forward and aft girt-bar rods (27) and (34).

NOTE : If the strand of lockwire (Material No. 19-010) goes through the barrel (30), you must do the adjustment procedure again until it is correct.

(f)Tighten the locknuts (28).
(g)Safety the locknuts (28) to the safety devices (29) with lockwire (Material No. 19-010).
(18)Remove the rigging pin (22) from the bellcrank lever (35) and the rigging pin (33) from the double lever (32).
(19)Move the emergency control handle (1) to the "DISARMED" (fully aft) position.

NOTE : It is now not necessary that the sliders (45) touch the stops (47) of the girt bar (43).

(20)Move the girt bar (43) in the forward and rear direction to make sure that the guide fittings (41) stay engaged with the slider surface (42).

NOTE : This movement can cause an asymmetrical position of the girt bar (43) which is permitted.

(21)If the sliders (45) disengage, do the adjustment procedures of the girt bar (43), sliders (45) and offset dimension "Z" again.
(22)Make sure that the emergency control handle (1) is at the "DISARMED" (fully aft) position.
(23)Move the inboard lever up so that the door lifts.
(24)Measure the gap "U" (Ref. Fig. 501).
(a)Measure the gap "U" between the nose of the spring pawl (7) and the notched sleeve (17).
(b)Make sure that the gap "U" is between 0.1 and 0.3 mm (0.0039 and 0.0118 in.).
(25)If the gap "U" is not correct, do the subsequent adjustment of the forward and the aft girt-bar rods (27) and (34).

NOTE : The adjustment of the rear girt-bar rod (34) and the forward girt bar rod (27) is the same. Therefore, only the adjustment of the forward girt-bar rod (27) is given.

(a)Cut, remove and discard the lockwire from the safety devices (29) and the locknuts (28).
(b)Loosen the locknuts (28).
(c)Turn the barrel (30) until the gap "U" is correct.

NOTE : If the gap "U" is more than 0.3 mm (0.118 in.), extend the length of the gir-bar rods (27) and (34) symmetrically. If the gap "U" is less than 0.1 mm (0.0039 in.), decrease the length symmetrically.

(d)Put a strand of lockwire (Material No. 19-010) into the inspection holes of the barrel (30) (to examine for correct installation and adjustment) of the forward and aft girt-bar rods (27) and (34).

NOTE : If the strand of lockwire (Material No. 19-010) goes through the barrel (30), you must do the adjustment procedure again until it is correct.

(e)Tighten the locknuts (28).
(f)Safety the locknuts (28) to the safety devices (29) with lockwire (Material No. 19-010).
(26)Make sure that you can install the rigging pins (3), (6), (22) and (33) freely, in their correct locations.
(27)If necessary, do the adjustment of the linkage mechanism again.

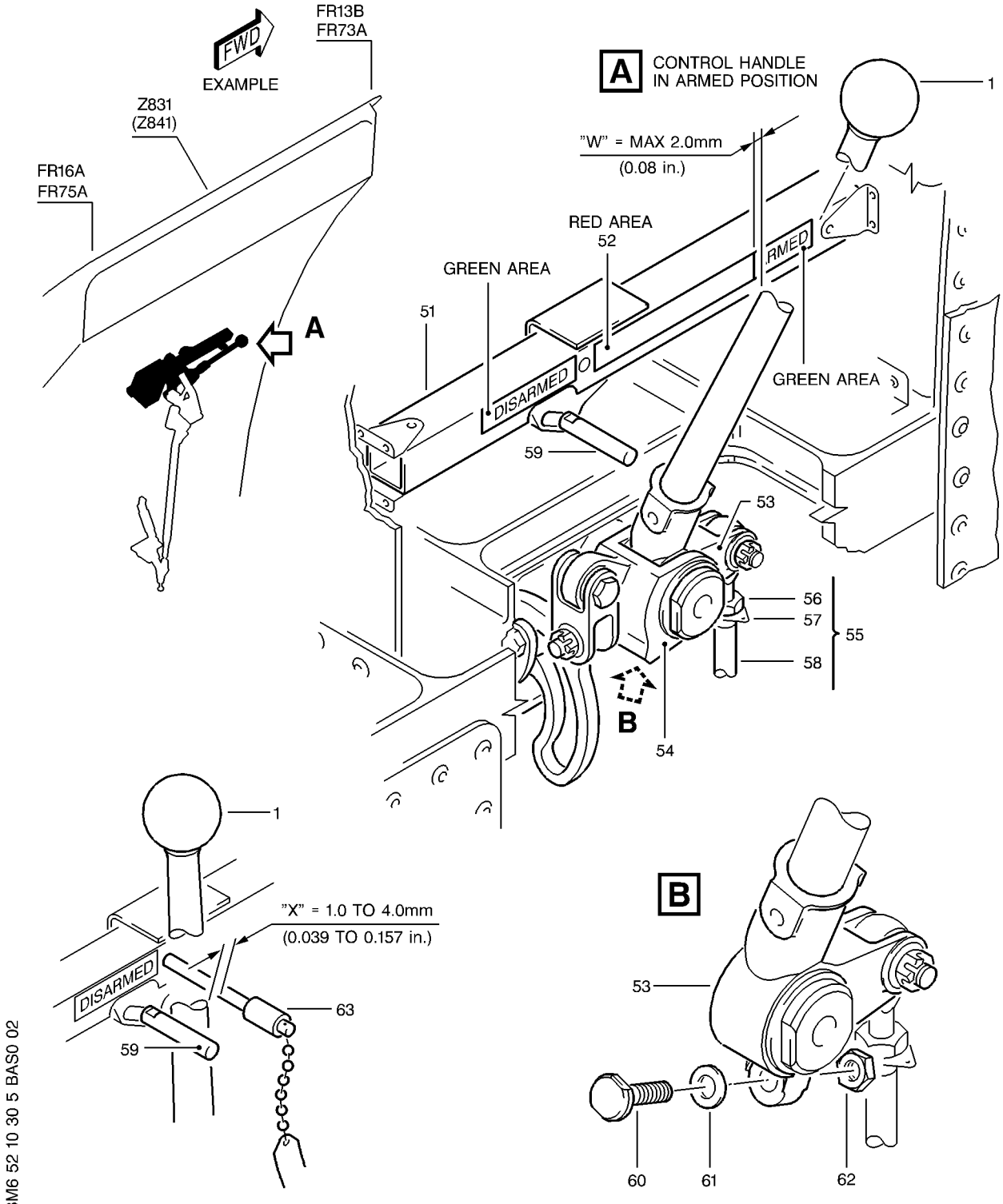
D. Adjustment of the Emergency Control-Handle Mechanism

R (Ref. Fig. 503)

R (1)Make sure that the door is closed and the inboard lever is moved down.
R (2)Make sure that the emergency control handle (1) is at the "DISARMED" (fully aft) position.
R (3)Make sure that the emergency control handle (1) touches the pin (59).
R (4)Install the safety pin (63).
R (5)Measure the gap "X" as follows:
R (a)Measure the gap "X" between the emergency control handle (1) and the safety pin (63).
R (b)Make sure that the gap "X" is between 1.0 and 4.0 mm (0.0393 and 0.1574 in.).
R (6)If the gap "X" is not correct, do the subsequent adjustment of the length of the handle rod (55):
R (a)Cut, remove and discard the lockwire from the safety devices (57) and the locknuts (56).
R (b)Loosen the locknuts (56).
R (c)Turn the barrel (58) until the gap "X" is correct.
R (d)Put a strand of lockwire (Material No. 19-010) into the inspection holes of the barrel (58) (to examine for correct installation and adjustment) of the handle rod (55).

R NOTE : If the strand of lockwire (Material No. 19-010) goes through the barrel (58), you must do the adjustment procedure again until it is correct.

R (e)Tighten the locknuts (56).
R (f)Safety the locknuts (56) to the safety devices (57) with lockwire (Material No. 19-010).
R (7)Adjust the "ARMED" position of the emergency control handle (1) as follows:
R (a)Temporarily install the stop bolt (60) and the nut (62) on the support lever (53).
R (b)Remove the safety pin (63).
R (c)Move the emergency control handle (1) to the "ARMED" (fully forward) position.
R (d)Put the rigging pin (3) into the rigging holes of the bellcrank bracket (2) and the bellcrank lever (4).
R (e)Make sure that the rigging pin (3) moves into the rigging pin holes



Emergency Control Handle and Handle Stop
Figure 503

R

freely.
(f)Measure the gap between the stop bolt (60) and the driver lever (54).
(g)Remove the nut (62) and the stop bolt (60) from the support lever (53).
(h)Prepare the new shim washer (61) so that its thickness is the same as the measured gap.
(j)Install the stop bolt (60), the new shim washer (61) and the nut (62) on the support lever (53).
(8)Move the emergency control handle (1) to the "ARMED" (fully forward) position.
(9)Make sure that the rigging pin (3) moves in the rigging pin holes freely.
(10)Measure the clearance "W" as follows:
(a)Measure the clearance "W" between the emergency control handle (1) and the divider line (where the red and green areas meet) on the placard (52).
(b)Make sure that the clearance "W" is a maximum of 2.0 mm (0.0787 in.).
(c)Make sure that the emergency control handle (1) is in the green area of the placard (52).
(11)If the clearance "W" is not correct, do the subsequent step:
(a)Remove the placard (52).
(b)Bond a new placard (52) in the correct position on the bar (51).

F. Test
(1)Open door.
(2)Prepare door for test as follows:
(a)Coat projecting thread ends and bolt heads as follows:
(b)For bolts attaching parts directly to door structure use polyurethane primer (Material No. 16-001) and polyurethane grey top coat (Material No. 16-002).
(c)For bolts in mechanism use Mastinox (Material No. 05-002).
(3)Apply corrosion-preventive compound (Material No. 05-005) thinly to all unpainted steel parts.
R (4)Apply grease (Material No. 04-022) to girt bar ends.
(5)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(6)Remove the ballast weight assy PN 98A52108008000 or the support frame PN 98A52108008001 with the appropriate ballast weight.
(7)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(8)Make certain drain holes are clean and free from obstruction.
(9)Install door lining and insulation (Ref. 52-10-13, P. Block 401).
(10)Install the dual escape slide assembly (Ref. 25-61-21, P. Block 401) or the slide raft assembly (Ref. 25-61-22, P. Block 401).

ACTION	RESULT
1. Close door	- No chafing of door lining - Smooth door closing
2. Measure force required to operate interior control handle	- Operating force must not exceed 16 daN (36 lbf.)

ACTION	RESULT
3. Operate emergency control handle	- Handle must move freely - Sliders engage in girt bar fittings
4. Measure force required to operate emergency control handle	- Operating force must not exceed 10 daN (22 lbf.)

R (c)Operate emergency control handle (1) to the "DISARMED" (fully aft/
R position) and insert safety pin (63).
R (d)Make sure that the related limit switches of the applicable door are
R correctly adjusted (Ref. 52-73-13, P. Block 501).

R G. Close-Up
R (1)Do the special precautions after work on the applicable door (Ref.
R 52-10-00, P. Block 301).
R (2)Make sure that the applicable door is closed.
R (3)Remove the access platform.

FWD, AFT EMERGENCY ESCAPE SLIDE RELEASE MECHANISM - INSPECTION/CHECK

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

NOTE : Should crack formation be suspected during the following inspection/check, an approved non-destructive test must be carried out. If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

1. Reason for the Job

A. Inspection/Check

NOTE : Item numbers correspond with operations in Para. 3.B.

(1)Visual inspection.
(2)Functional check.
(3)Measurement.
(4)Measurement of fits and clearances to make certain that door components are free from excessive wear.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B. 98A52108003001	Safety Pin Set - Emergency Control Handle
C. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
or 98A52108008001	Support Frame - Ballast Weight, Doors NOTE : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
D.	Circuit Breaker Safety Clips and Tags
E.	Measuring Instruments
F.	Torch
G.	Inspection Mirror
H.	Magnifying Glass X10
J. Material No. 04-004A	Common Greases (Ref. 20-31-00)
K. Material No. 05-005	Special Materials (Ref. 20-31-00)
L. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-30, P. Block 401	FWD, AFT Emergency Escape Slide Release Mechanism
- 52-10-30, P. Block 501	FWD, AFT Emergency Escape Slide Release Mechanism
- 52-73-13, P. Block 501	Limit Switch

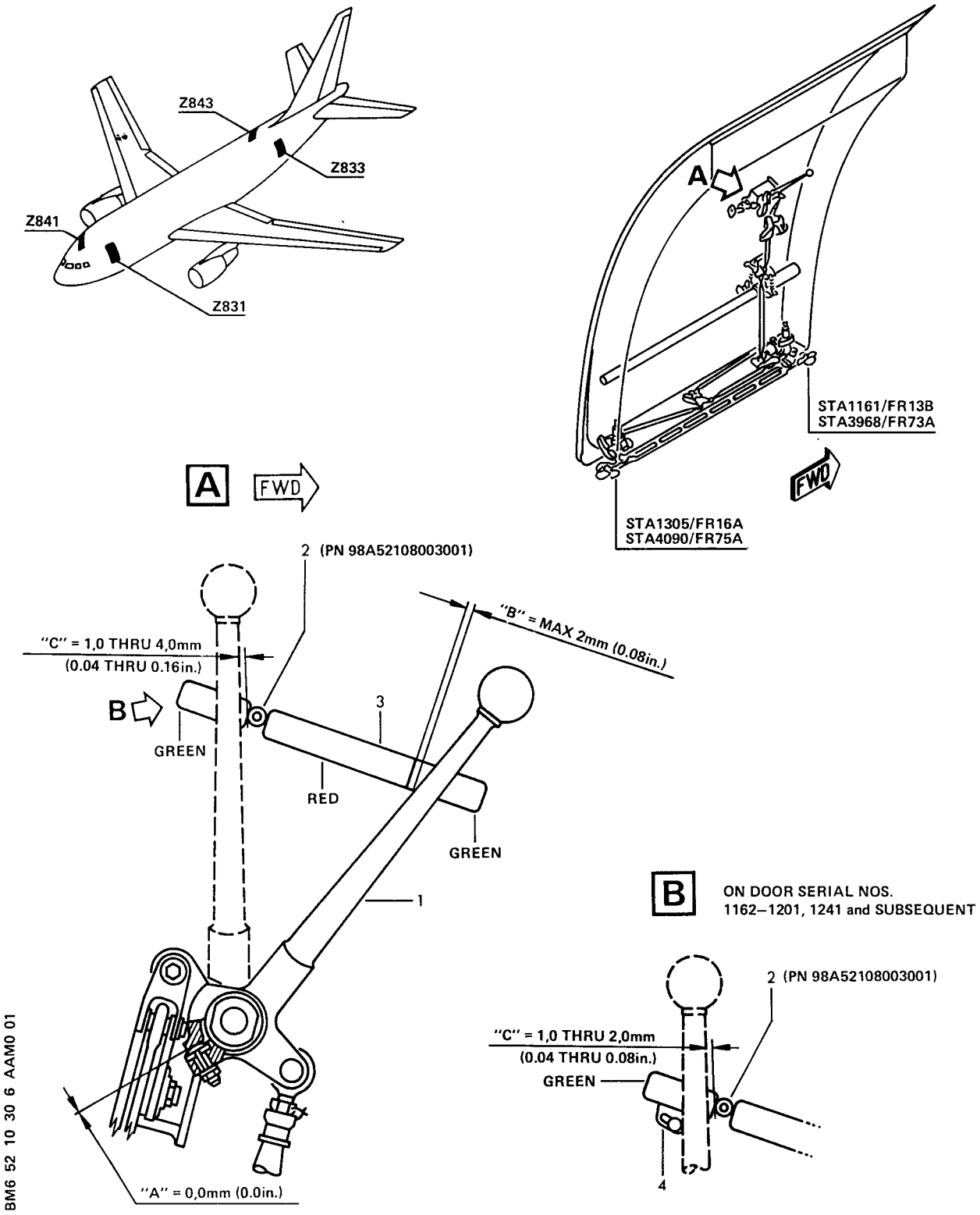
3. Procedure

A. Job Set-Up
(1)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

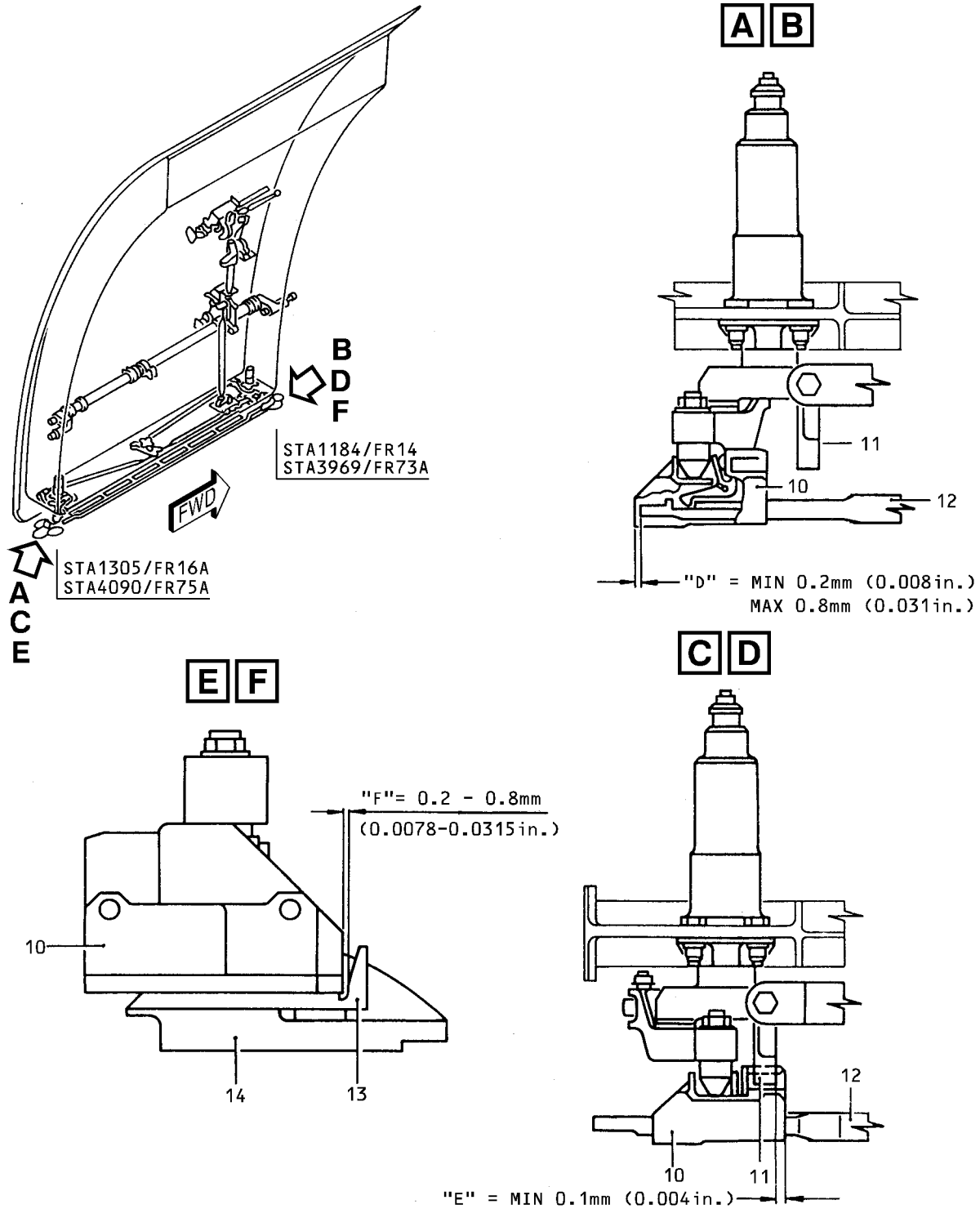
(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Open door.
(4)Remove either container with dual escape slide (Ref. 25-61-12, P. Block 401) or container with slide raft and replace girt bar on passenger/crew door (Ref. 25-61-22, P. Block 401).
(5)Remove door lining and insulation (Ref. 52-10-13, P. Block 401).
R (6)Install ballast weight assy PN 98A52108008000 or support frame
R PN 98A52108008001 with the appropriate ballast weight.

B. Inspection/Check
(1)Visual inspection
(a)Check complete emergency escape slide release mechanism for:
1 Corrosion (Ref. 51-74-10, P. Block 801).
2 Scratches, dents and marks (Ref. 51-73-10, P. Block 801).
3 Tight fit.
4 Peeling and flaking of paint (Ref. 51-75-10, P. Block 801).
(2)Functional check
(Ref. Fig. 601)
(Ref. Fig. 602)
(a)Check 'ARMED' position (emergency control handle (1) in fully forward position) as follows:
1 Close door.
2 Set emergency control handle (1) to fully forward position.
3 Measure gap 'A'.
4 Measure distance 'D' on both ends of girt bar (12).
NOTE : To carry out this measurement it may be necessary to centralize girt bar (12) by hand.
5 Make certain that gap 'F' is between 0.2 and 0.8 mm (0.0078 and



Emergency Control Handle
Figure 601

R



BM6 52 10 30 6 ACMO 02

Girt Bar, Jaws and Sliders
Figure 602

R

0.0315 in.). If not ref. 52-10-11, P. Block 501, Adjustment of Girt Bar Fittings.

** ON FWD PASSENGER/CREW DOORS

6 Measure gap 'B' between emergency control handle (1) and junction of red green area on self-adhesive label (3).

** ON FWD AND AFT PASSENGER/CREW DOORS
** ON DOOR SERIAL NOS. 1217 - 1237

7 Set emergency control handle (1) to fully aft position and insert safety pin (2) PN 98A52108003001. If safety pin (2) PN 98A52108003001 cannot be inserted, ref. adjustment of emergency control handle (1) and gap 'C' (Ref. 52-10-30, P. Block 501).

** ON DOOR SERIAL NOS. 1162 - 1201, 1241 AND SUBSEQUENT

8 Set emergency control handle (1) to fully aft position and insert safety pin (2) PN 98A52108003001. If safety pin (2) PN 98A52108003001 cannot be easily inserted, move blanking device (4) by hand and insert safety pin (2) PN 98A52108003001.
9 Check and adjust gap 'C' between emergency control handle (1) and the largest diameter of head on safety pin (2) (Ref. 52-10-30, P. Block 501).

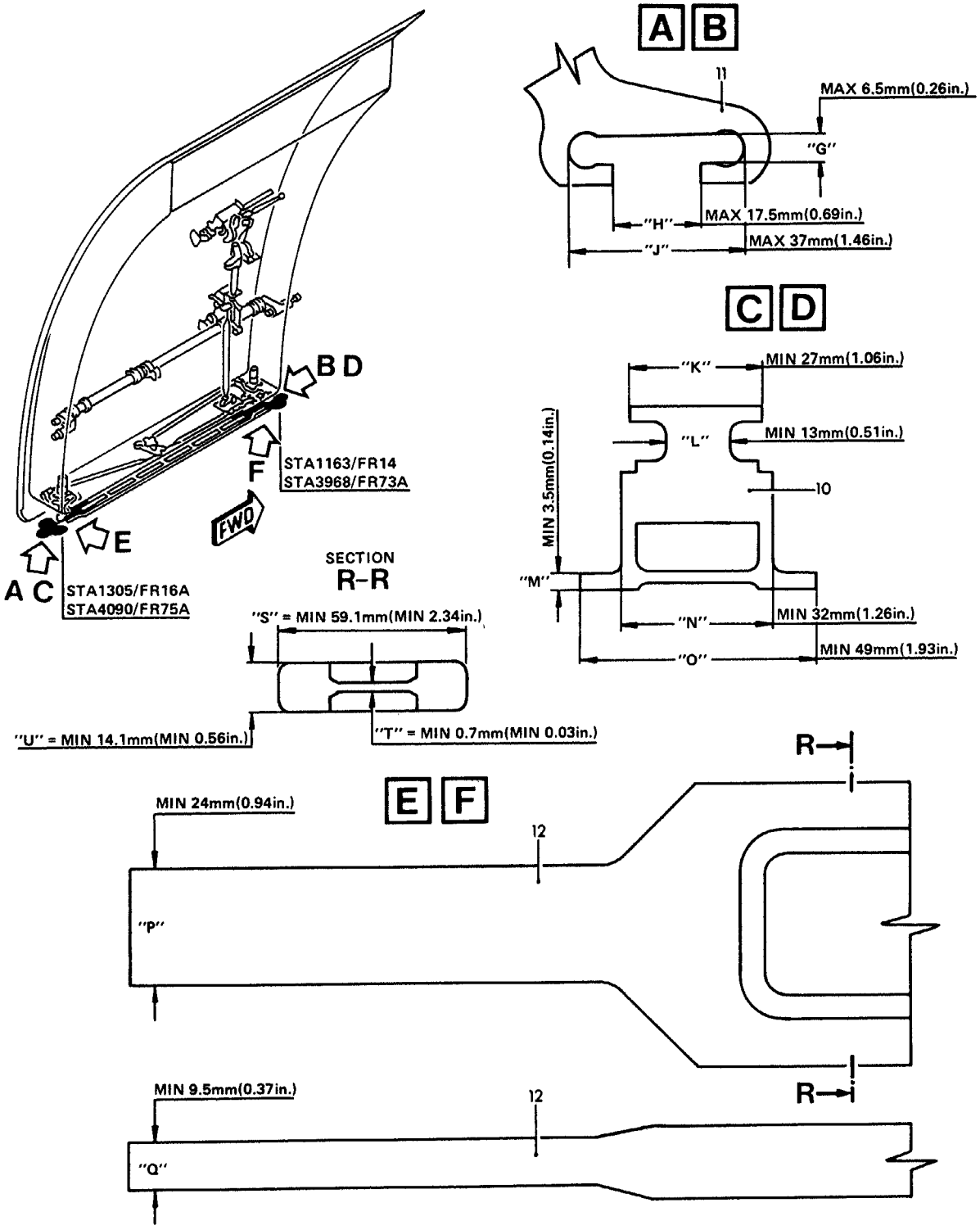
** ON DOOR SERIAL NOS. ALL

10 Remove safety pin (2) PN 98A52108003001.
(b)Check force of emergency control handle (1) as follows:
1 Close door.
2 Set emergency control handle (1) from fully aft position to fully forward position and back to fully aft position. Handle force in each direction must not exceed max. 10 daN (22 lbf.).
NOTE : Engagement of sliders (10) in girt bar fittings (14) must be smooth.
(c)Check by means of exterior control handle that emergency control handle (1) correctly returns from fully forward to fully aft position as follows:
1 Close door.
2 Set emergency control handle (1) to fully forward position.
3 Open door using exterior control handle.
4 Check that emergency control handle (1) is in fully aft position. and can be secured with safety pin (2) PN 98A52108003001.
(d)Check with door opened that emergency control handle (1) is locked as follows:
1 Open door.
WARNING : SLIDERS WITH GIRT BAR MAY DROP TO FULL EXTENT.
2 Operate emergency control handle (1) as far as possible to fully
R aft (disarmed) position.
3 Measure distances 'E' between lockjaws (11) and sliders (10).
(e)Check adjustment of limit switches (Ref. 52-73-13, P. Block 501).

(3)Measurement
(Ref. Fig. 603)
(a)Measure wear of jaws (11).
1 Measure dimension 'G'.
2 Measure dimension 'H'.
3 Measure dimension 'J'.
(b)Measure wear of sliders (10).
1 Measure dimension 'K'.
2 Measure dimension 'L'.
3 Measure dimension 'M'.
4 Measure dimension 'N'.
5 Measure dimension 'O'.
(c)Measure wear of girt bar (12).
1 Measure dimension 'P'.
2 Measure dimension 'Q'.
3 Measure dimension 'S'.
4 Measure dimension 'T'.
5 Measure dimension 'U'.
For removal/installation and adjustment/test: (Ref. 52-10-30, P. Block 401 and Ref. 52-10-30, P. Block 501).
(4)Measurement of fits and clearances
Refer to tables following this topic.

NOTE : 1) in any column denotes bearings or PTFE-bushes.

E. Close-Up
R (1)Remove ballast weight assy PN 98A52108008000 or support frame
R PN 98A52108008001 with the appropriate ballast weight.
(2)Open door.
(3)Apply grease (Material No. 04-004A) to girt bar ends.
(4)Apply corrosion-preventive compound (Material No. 05-005) thinly to all unpainted steel parts.
(5)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(6)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(7)Make certain that drain holes are clean and free from obstructions.
(8)Install door lining and insulation (Ref. 52-10-13, P. Block 401).
(9)Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide raft (Ref. 25-61-22, P. Block 401).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(10)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(11)Close door.
(12)Remove access platform.

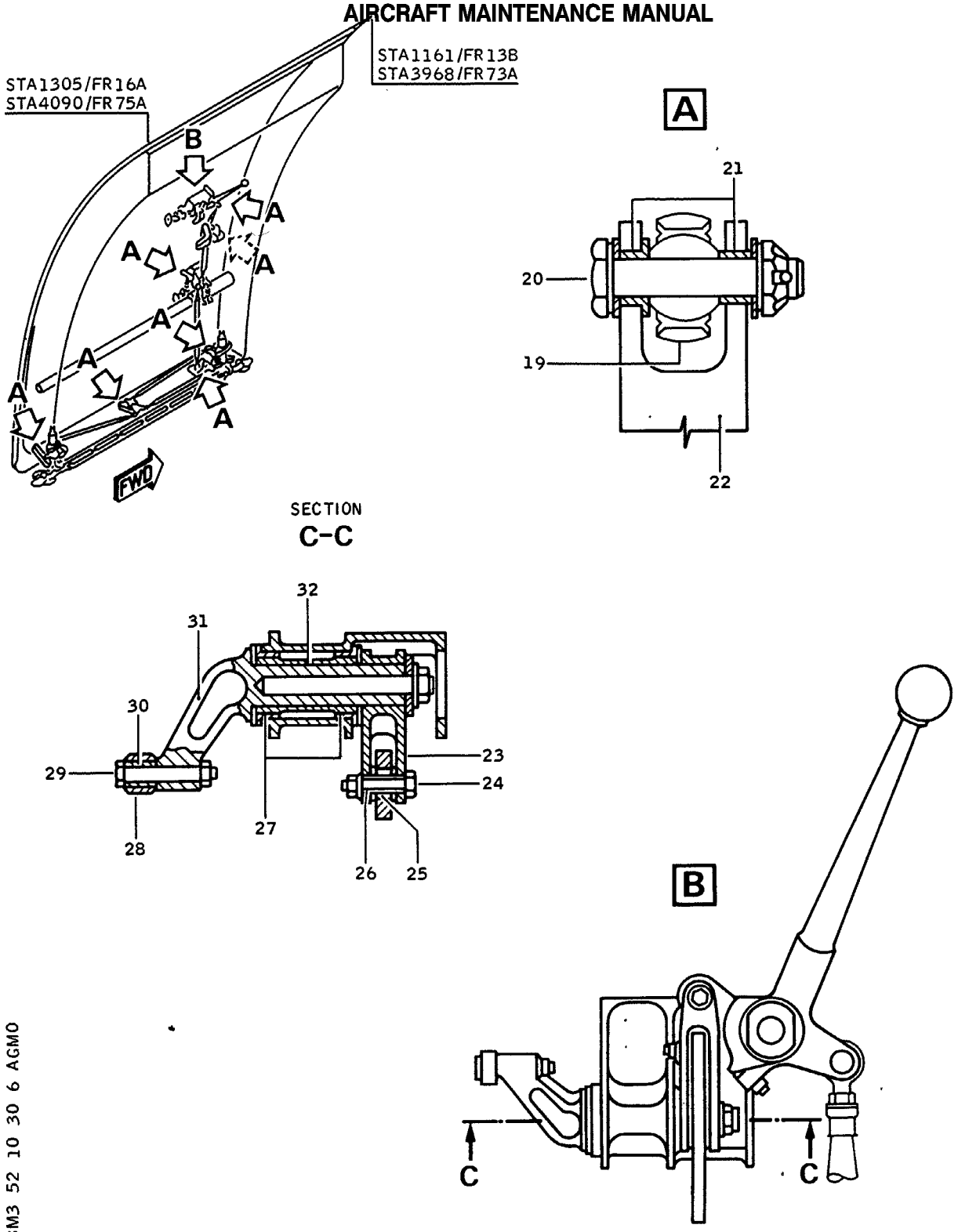


Jaws, Sliders and Girt Bar - Wear Tolerances
Figure 603

Fits and Clearances
(Ref. Fig. 604)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A OD 20	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		1)
			0.000 (0.0000)	0.026 (0.0010)			
A ID 19	6.337 (0.2495)	6.350 (0.2500)				1)	
A OD 20	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
A ID 21	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
A OD 21	8.472 (0.3335)	8.487 (0.3341)			8.451 (0.3327)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
A ID 22	8.500 (0.3346)	8.515 (0.3352)				8.536 (0.3361)	
C-C OD 31	19.730 (0.7768)	19.743 (0.7773)			19.711 (0.7760)		
			0.007 (0.0003)	0.041 (0.0016)			0.080 (0.0031)
C-C ID 32	19.750 (0.7776)	19.771 (0.7784)				19.791 (0.7792)	
C-C OD 32	25.433 (1.0013)	25.446 (1.0018)			25.421 (1.0008)		
			-0.021 -(0.0008)	0.023 (0.0009)			1)
C-C ID 27	25.425 (1.0010)	25.456 (1.0022)				1)	



Typical Rod Connection and Release Mechanism
Figure 604

Fits and Clearances (Ref. Fig. 604)

** ON FWD AND AFT PASSENGER/CREW DOORS

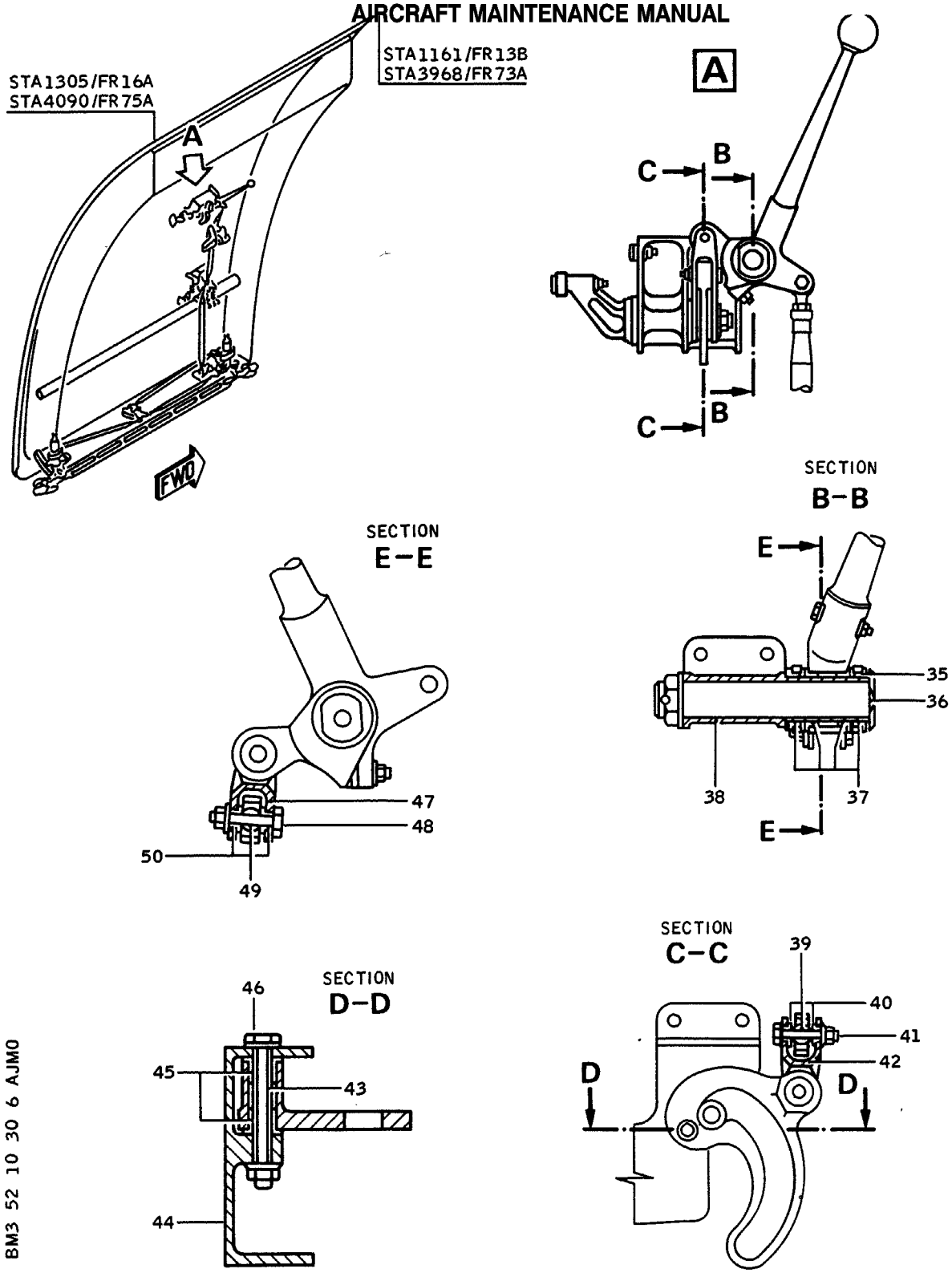
Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
C-C OD 24	6.324 (0.2490)	6.337 (0.2495)			6.310 (0.2484)		
			0.005 (0.0002)	0.035 (0.0014)			0.070 (0.0028)
C-C ID 26	6.342 (0.2497)	6.359 (0.2504)				6.380 (0.2512)	
C-C OD 29	7.912 (0.3115)	7.922 (0.3119)			7.891 (0.3107)		
			0.008 (0.0003)	0.038 (0.0015)			0.080 (0.0031)
C-C ID 30	7.930 (0.3122)	7.950 (0.3130)				7.971 (0.3138)	
C-C OD 30	10.966 (0.4317)	10.984 (0.4324)			10.936 (0.4306)		
			0.016 (0.0006)	0.061 (0.0024)			0.120 (0.0047)
C-C ID 28	11.000 (0.4331)	11.027 (0.4341)				11.056 (0.4353)	
C-C OD 26	7.956 (0.3132)	7.965 (0.3136)			7.947 (0.3129)		
			-0.015 (-0.0006)	0.017 (0.0007)			0.034 (0.0013)
C-C ID 25	7.950 (0.3130)	7.973 (0.3139)				7.981 (0.3142)	
C-C OD 26	7.956 (0.3132)	7.965 (0.3136)			7.950 (0.3130)		
			-0.002 (-0.0001)	0.022 (0.0009)			0.035 (0.0014)
C-C ID 23	7.963 (0.3135)	7.978 (0.3141)				7.985 (0.3144)	

Fits and Clearances
(Ref. Fig. 604)
(Ref. Fig. 605)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension inches mm (in.) Min.	Original Mfg Limits: Dimension inches mm (in.) Max.	Original Mfg Limits: Assy. Clearance mm (in.) Min.	Original Mfg Limits: Assy. Clearance mm (in.) Max.	In-Service Wear Limits: Dimension Limits mm (in.) Min.	In-Service Wear Limits: Dimension Limits mm (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm (in.)
C-C OD 29	7.912 (0.3115)	7.922 (0.3119)			7.901 (0.3111)		
			0.003 (0.0001)	0.028 (0.0011)			0.060 (0.0024)
C-C ID 31	7.925 (0.3120)	7.940 (0.3126)				7.961 (0.3134)	
B-B OD 36	19.180 (0.7551)	19.197 (0.7558)			19.160 (0.7543)		
			0.003 (0.0001)	0.044 (0.0018)			0.080 (0.0031)
B-B ID 35	19.200 (0.7559)	19.224 (0.7569)				19.240 (0.7575)	
B-B OD 35	22.256 (0.8762)	22.269 (0.8767)			22.245 (0.8758)		
			-0.021 -(0.0008)	0.022 (0.0009)			1)
B-B ID 37	22.248 (0.8759)	22.278 (0.8771)				1)	
B-B OD 36	19.017 (0.7487)	19.030 (0.7492)			18.994 (0.7478)		
			0.020 (0.0008)	0.054 (0.0021)			0.100 (0.0039)
B-B ID 38	19.050 (0.7500)	19.071 (1.7508)				19.094 (0.7517)	
C-C OD 41	6.312 (0.2485)	6.337 (0.2495)			6.300 (0.2480)		
			-0.003 -(0.0001)	0.026 (0.0010)			1)
	6.324 (0.2490)	6.337 (0.2495)					
			0.000 (0.0000)	0.038 (0.0015)			
C-C ID 39	6.337 (0.2495)	6.350 (0.2500)				1)	

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension inches mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	



Release Mechanism
Figure 605

Fits and Clearances (Ref. Fig. 605)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm Max.	Original Mfg Limits: Dimension (in.) Min.	Original Mfg Limits: Dimension (in.) Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm Max.	Original Mfg Limits: Assy. Clearance (in.) Min.	Original Mfg Limits: Assy. Clearance (in.) Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm Max.	In-Service Wear Limits: Dimension Limits (in.) Min.	In-Service Wear Limits: Dimension Limits (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm (in.)
C-C OD 41	6.312	6.337	(0.2485)	(0.2495)					6.305		(0.2482)		
					-0.013	0.025	-(0.0005)	(0.0010)					1)
	6.324	6.337	(0.2490)	(0.2495)									
					-0.014	0.020	-(0.0006)	(0.0008)					
C-C ID 40	6.323	6.332	(0.2489)	(0.2493)						1)			
C-C OD 40	8.486	8.495	(0.3341)	(0.3344)					8.470		(0.3335)		
					0.005	0.029	(0.0002)	(0.0011)					0.060 (0.0024)
C-C ID 42	8.500	8.515	(0.3346)	(0.3352)						8.530	(0.3358)		
D-D OD 46	6.312	6.337	(0.2485)	(0.2495)					6.288		(0.2476)		
					0.005	0.047	(0.0002)	(0.0019)					0.095 (0.0037)
D-D ID 43	6.342	6.359	(0.2497)	(0.2504)						6.383	(0.2513)		
D-D OD 43	7.956	7.965	(0.3132)	(0.3136)					7.947		(0.3129)		
					-0.015	0.017	-(0.0006)	(0.0007)					1)
D-D ID 45	7.950	7.973	(0.3130)	(0.3139)						1)			
D-D OD 43	7.956	7.965	(0.3132)	(0.3136)					7.952		(0.3131)		
					-0.002	0.017	-(0.0001)	(0.0007)					0.026 (0.0010)
D-D ID 44	7.963	7.973	(0.3135)	(0.3139)						7.978	(0.3141)		

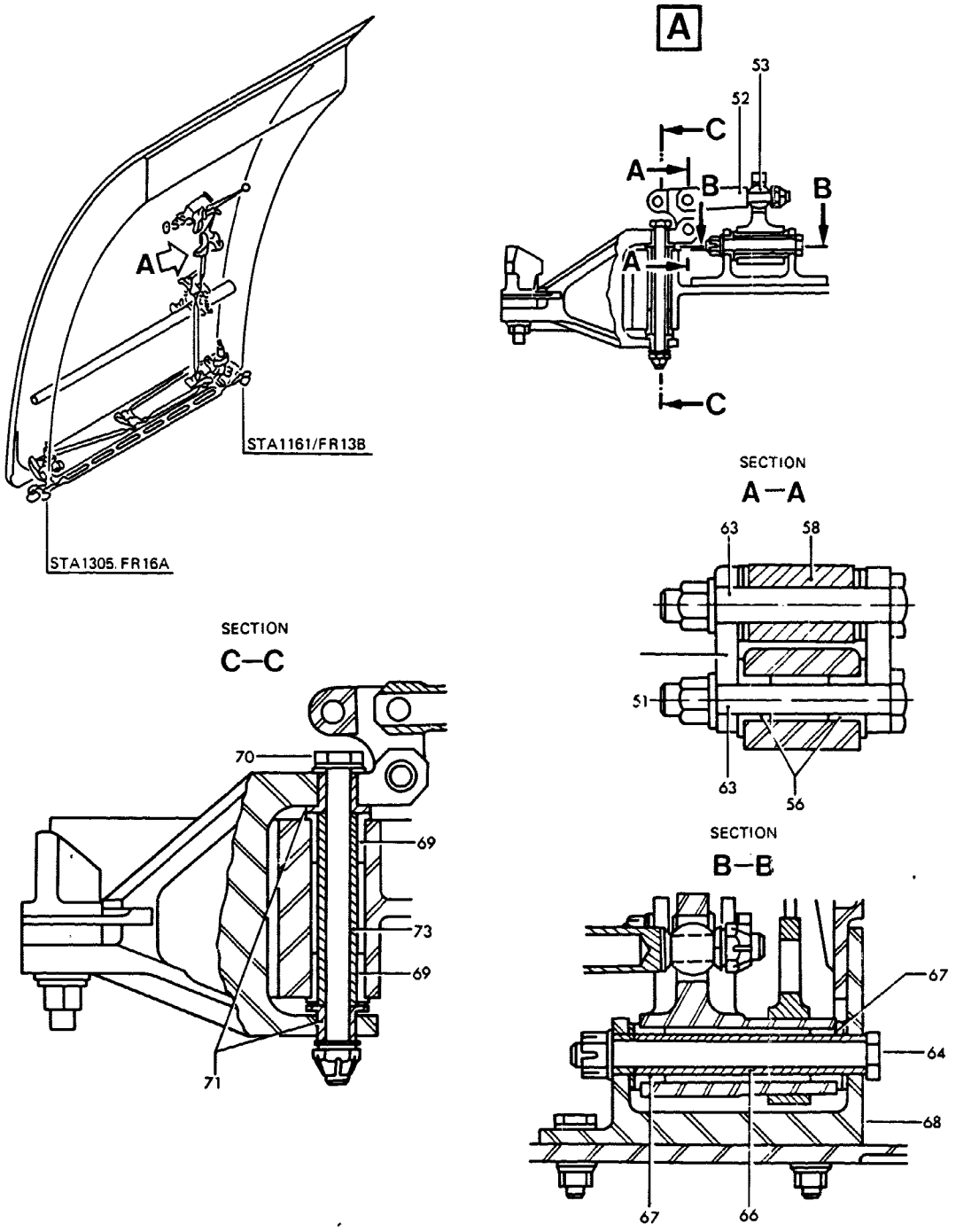
Fits and Clearances (Ref. Fig. 605)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
E-E OD 48	6.324 (0.2490)	6.334 (0.2494)			6.311 (0.2485)		
			0.003 (0.0001)	0.026 (0.0010)			1)
E-E ID 49	6.337 (0.2495)	6.350 (0.2500)				1)	
E-E OD 48	6.324 (0.2490)	6.334 (0.2494)			6.322 (0.2489)		
			-0.008 -(0.0003)	0.008 (0.0003)			0.012 (0.0005)
E-E ID 50	6.326 (0.2491)	6.332 (0.2493)				6.334 (0.2494)	
E-E OD 50	8.486 (0.3341)	8.495 (0.3344)			8.471 (0.3335)		
			0.005 (0.0002)	0.029 (0.0011)			0.060 (0.0024)
E-E ID 47	8.500 (0.3346)	8.515 (0.3352)				8.531 (0.3359)	

Fits and Clearances
(Ref. Fig. 606)
** ON FWD PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm Max.	Original Mfg Limits: Dimension (in.) Min.	Original Mfg Limits: Dimension (in.) Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm Max.	Original Mfg Limits: Assy. Clearance (in.) Min.	Original Mfg Limits: Assy. Clearance (in.) Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm Max.	In-Service Wear Limits: Dimension Limits (in.) Min.	In-Service Wear Limits: Dimension Limits (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm (in.)
A OD 52	6.328	6.337	(0.2491)	(0.2495)					6.317		(0.2487)		
					0.000	0.022	(0.0000)	(0.0009)					0.044 (0.0017)
A ID 53	6.337	6.350	(0.2495)	(0.2500)						6.361		(0.2504)	
A-A OD 63	6.314	6.327	(0.2486)	(0.2491)					6.294		(0.2478)		
					0.013	0.041	(0.0005)	(0.0016)					0.082 (0.0032)
A-A ID 51 56 58	6.340	6.355	(0.2496)	(0.2502)						6.376		(0.2510)	
B-B OD 64	6.324	6.337	(0.2490)	(0.2495)					6.311		(0.2485)		
					0.005	0.027	(0.0002)	(0.0016)					0.054 (0.0021)
B-B ID 66	6.342	6.351	(0.2497)	(0.2500)						6.365		(0.2506)	
B-B OD 66	9.548	9.555	(0.3759)	(0.3762)					9.545		(0.3758)		
					-0.015	0.015	-(0.0006)	(0.0006)					0.022 (0.0009)
B-B ID 67	9.540	9.563	(0.3756)	(0.3765)						9.567		(0.3767)	
B-B OD 66	9.548	9.555	(0.3759)	(0.3762)					9.539		(0.3756)		
					-0.002	0.029	-(0.0001)	(0.0011)					0.043 (0.0016)
B-B ID 68	9.553	9.575	(0.3761)	(0.3770)						9.582		(0.3772)	



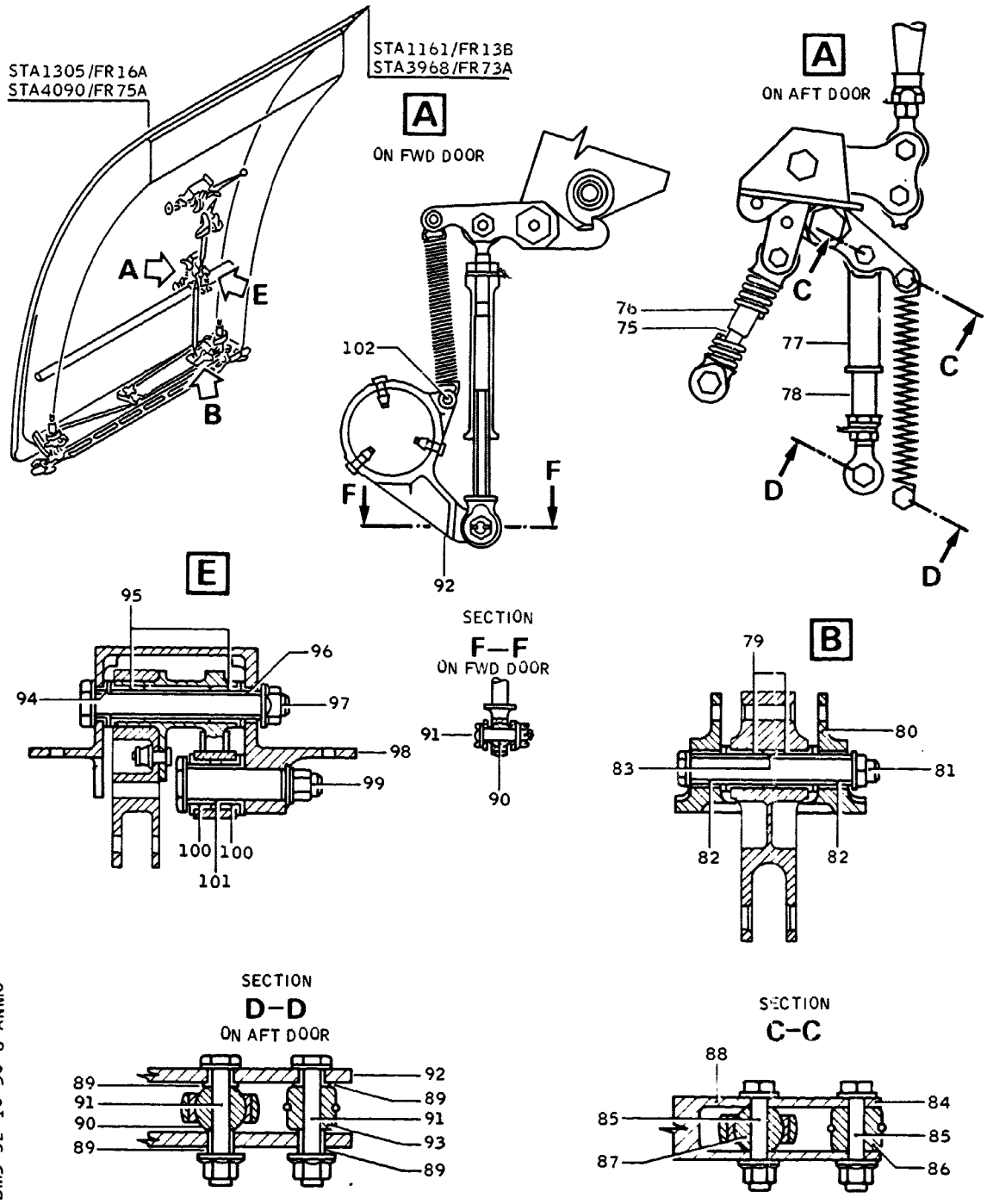
Stop Lever and Bellcrank Unit -
FWD Passenger/Crew Door
Figure 606

Fits and Clearances
(Ref. Fig. 607)

** ON FWD PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
C-C OD 71	6.312 (0.2485)	6.337 (0.2495)			6.294 (0.2478)		
			0.003 (0.0001)	0.043 (0.0017)			0.080 (0.0031)
C-C ID 73	6.340 (0.2496)	6.355 (0.2502)				6.374 (0.2509)	
C-C OD 73	9.540 (0.3756)	9.555 (0.3762)			9.534 (0.3753)		
			-0.015 (0.0006)	0.023 (0.0009)			0.034 (0.0014)
C-C ID 69	9.540 (0.3756)	9.563 (0.3765)				9.568 (0.3767)	
C-C OD 71	6.312 (0.2485)	6.337 (0.2495)			6.294 (0.2478)		
			0.003 (0.0001)	0.043 (0.0017)			0.080 (0.0031)
C-C ID 70	6.340 (0.2496)	6.355 (0.2502)				6.374 (0.2509)	
A OD102	4.673 (0.1840)	4.724 (0.1860)			4.610 (0.1815)		
			0.026 (0.0010)	0.127 (0.0005)			0.250 (0.0100)
A ID 92	4.750 (0.1870)	4.800 (0.1890)				4.860 (0.1913)	
F-F OD 91	4.800 (0.1890)	4.813 (0.1895)			4.787 (0.1885)		
			0.000 (0.0000)	0.025 (0.0010)			0.050 (0.0020)
F-F ID 92	4.813 (0.1895)	4.825 (0.1899)				4.837 (0.1904)	

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
F-F OD 91	4.800 (0.1890)	4.813 (0.1895)			4.788 (0.1885)		
			0.000 (0.0000)	0.026 (0.0010)			0.050 (0.0020)
F-F ID 90	4.813 (0.1895)	4.826 (0.1900)				4.838 (0.1905)	

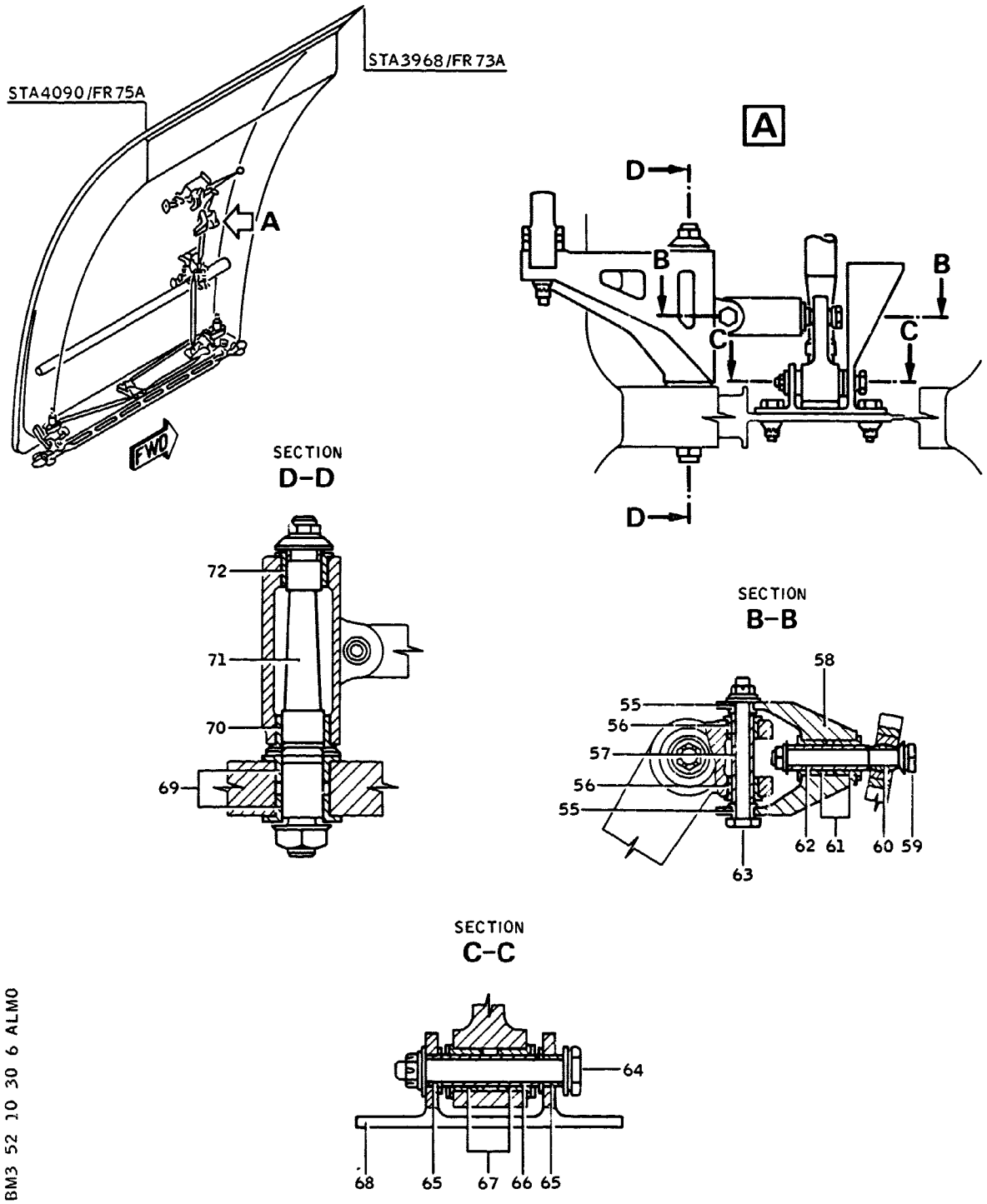


Locking Unit
Figure 607

Fits and Clearances
(Ref. Fig. 608)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B OD 63	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
B-B ID 57	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
B-B OD 57	7.890 (0.3106)	7.912 (0.3115)			7.876 (0.3101)		
			0.038 (0.0015)	0.083 (0.0033)			1)
B-B ID 56	7.950 (0.3130)	7.973 (0.3139)				1)	
B-B OD 63	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.070 (0.0028)
B-B ID 55	6.342 (0.2497)	6.351 (0.2500)				6.376 (0.2510)	
B-B OD 55	7.956 (0.3132)	7.965 (0.3136)			7.950 (0.3130)		
			-0.002 -(0.0001)	0.022 (0.0009)			0.049 (0.0019)
B-B ID 58	7.963 (0.3135)	7.978 (0.3141)				7.999 (0.3149)	



BM3 52 10 30 6 ALMO

Stop Lever and Bellcrank Unit -
AFT Passenger/Crew Door
Figure 608

Fits and Clearances (Ref. Fig. 608)

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B OD 59	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.013 (0.0005)	0.041 (0.0016)			0.080 (0.0031)
B-B ID 62	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
B-B OD 62	9.512 (0.3745)	9.527 (0.3751)			9.505 (0.3742)		
			0.013 (0.0005)	0.051 (0.0020)			1)
B-B ID 61	9.540 (0.3756)	9.563 (0.3765)				1)	
B-B OD 59	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			-0.015 -(0.0006)	0.026 (0.0010)			1)
B-B ID 60	6.322 (0.2489)	6.350 (0.2500)				1)	
C-C OD 64	6.324 (0.2490)	6.337 (0.2495)			6.306 (0.2483)		
			0.005 (0.0002)	0.027 (0.0011)			0.058 (0.0023)
C-C ID 66	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
C-C OD 66	7.956 (0.3132)	7.965 (0.3136)			7.950 (0.3130)		
			-0.015 -(0.0006)	0.017 (0.0007)			1)
C-C ID 67	7.950 (0.3130)	7.973 (0.3139)				1)	

Fits and Clearances (Ref. Fig. 608, 607)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm Max.	Original Mfg Limits: Dimension (in.) Min.	Original Mfg Limits: Dimension (in.) Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm Max.	Original Mfg Limits: Assy. Clearance (in.) Min.	Original Mfg Limits: Assy. Clearance (in.) Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm Max.	In-Service Wear Limits: Dimension Limits (in.) Min.	In-Service Wear Limits: Dimension Limits (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm (in.)
C-C OD 64	6.324	6.337	(0.2490)	(0.2495)					6.306		(0.2483)		
					0.005	0.027	(0.0002)	(0.0011)					0.058 (0.0023)
C-C ID 65	6.342	6.351	(0.2497)	(0.2500)						6.364		(0.2506)	
C-C OD 65	8.472	8.487	(0.3335)	(0.3341)					8.451		(0.3327)		
					0.013	0.043	(0.0005)	(0.0017)					0.085 (0.0033)
C-C ID 68	8.500	8.515	(0.3346)	(0.3352)						8.536		(0.3361)	
D-D OD 71	12.680	12.710	(0.4992)	(0.5004)					12.664		(0.4986)		1)
					0.005	0.061	(0.0002)	(0.0024)					
D-D ID 72	12.715	12.741	(0.5006)	(0.5016						1)			
D-D OD 71	15.860	15.890	(0.6244)	(0.6256)									1)
					0.003	0.058	(0.0001)	(0.0023)	15.844		(0.6238)		
D-D ID 70	15.893	15.918	(0.6257)	(0.6267)						1)		(	
A OD 75	6.972	6.987	(0.2745)	(0.2751)					6.965		(0.2742)		
					0.013	0.043	(0.0005)	(0.0017)					0.071 (0.0028)
A ID 76	7.000	7.015	(0.2756)	(0.2762)						7.036		(0.2770)	

Fits and Clearances (Ref. Fig. 607)

**** ON AFT PASSENGER/CREW DOORS**

Detail and item No.	Original Mfg Limits: Dimension mm Min.	Original Mfg Limits: Dimension mm Max.	Original Mfg Limits: Dimension (in.) Min.	Original Mfg Limits: Dimension (in.) Max.	Original Mfg Limits: Assy. Clearance mm Min.	Original Mfg Limits: Assy. Clearance mm Max.	Original Mfg Limits: Assy. Clearance (in.) Min.	Original Mfg Limits: Assy. Clearance (in.) Max.	In-Service Wear Limits: Dimension Limits mm Min.	In-Service Wear Limits: Dimension Limits mm Max.	In-Service Wear Limits: Dimension Limits (in.) Min.	In-Service Wear Limits: Dimension Limits (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm (in.)
A OD 78	11.966	11.984	(0.4711)	(0.4718)					11.957		(0.4707)		
					0.016	0.052	(0.0006)	(0.0020)					0.086 (0.0034)
A ID 77	12.000	12.018	(0.4724)	(0.4731)						12.043		(0.4741)	
**** ON FWD AND AFT PASSENGER/CREW DOORS**													
B OD 81	6.324	6.337	(0.2490)	(0.2495)					6.306		(0.2483)		
					0.005	0.027	(0.0002)	(0.0011)					0.058 (0.0023)
B ID 83	6.342	6.351	(0.2497)	(0.2500)						6.364		(0.2506)	
B OD 83	9.546	9.555	(0.3758)	(0.3762)					9.505		(0.3742)		
					-0.015	0.017	-(0.0006)	(0.0007)					1)
B ID 79	9.540	9.563	(0.3756)	(0.3765)						1)			
B OD 81	6.324	6.337	(0.2490)	(0.2495)					6.306		(0.2483)		
					0.005	0.027	(0.0002)	(0.0011)					0.058 (0.0023)
B ID 82	6.342	6.351	(0.2497)	(0.2500)						6.364		(0.2506)	
B OD 82	9.546	9.555	(0.3758)	(0.3762)					9.535		(0.3754)		
					-0.002	0.022	-(0.0001)	(0.0009)					0.044 (0.0017)
B ID 80	9.553	9.568	(0.3761)	(0.3767)						9.579		(0.3771)	

Fits and Clearances (Ref. Fig. 607)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B OD 83	9.546 (0.3758)	9.555 (0.3762)			9.535 (0.3754)		
			-0.002 -(0.0001)	0.022 (0.0009)			0.044 (0.0017)
B ID 80	9.553 (0.3761)	9.568 (0.3767)				9.579 (0.3771)	
C-C OD 85	4.800 (0.1890)	4.813 (0.1895)			4.783 (0.1883)		
			0.000 (0.0000)	0.026 (0.0010)			1)
C-C ID 87	4.813 (0.1895)	4.826 (0.1900)				1)	
C-C OD 85	4.800 (0.1890)	4.813 (0.1895)			4.783 (0.1883)		
			-0.013 -(0.0005)	0.012 (0.0005)			0.047 (0.0019)
C-C ID 86	4.800 (0.1890)	4.812 (0.1895)				4.830 (0.1902)	
C-C OD 85	4.800 (0.1890)	4.813 (0.1895)			4.783 (0.1883)		
			0.003 (0.0001)	0.028 (0.0011)			0.056 (0.0022)
C-C ID 88	4.816 (0.1896)	4.828 (0.1901)				4.839 (0.1905)	
C-C OD 85	4.800 (0.1890)	4.813 (0.1895)			4.783 (0.1883)		
			-0.013 -(0.0005)	0.300 (0.0118)			0.337 (0.0133)
C-C ID 84	4.800 (0.1890)	5.100 (0.2008)				5.120 (0.2016)	

Fits and Clearances (Ref. Fig. 607)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
D-D OD 91	4.800 (0.1890)	4.813 (0.1895)	0.0000 (0.00000)	0.026 (0.0010)	4.783 (0.1883		1)
D-D ID 90	4.813 (0.1895)	4.826 (0.1900)				1)	

Fits and Clearances (Ref. Fig. 607)

** ON AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
D-D OD 91	4.800 (0.1890)	4.813 (0.1895)			4.783 (0.1883)		
			-0.013 -(0.0005)	0.012 (0.0004)			0.047 (0.0019)
D-D ID 93	4.800 (0.1890)	4.812 (0.1895)				4.830 (0.1902)	
D-D OD 91	4.800 (0.1890)	4.813 (0.1895)			4.783 (0.1883)		
			0.004 (0.0002)	0.025 (0.0009)			0.052 (0.0020)
D-D ID 89	4.817 (0.1896)	4.825 (0.1900)				4.835 (0.1904)	
D-D OD 89	6.972 (0.2745)	6.987 (0.2751)			6.951 (0.2737)		
			0.013 (0.0005)	0.043 (0.0017)			0.085 (0.0033)
D-D ID 92	7.000 (0.2756)	7.015 (0.2762)				7.036 (0.2770)	
E OD 99	11.087 (0.4365)	11.097 (0.4369)			11.073 (0.4359)		
			0.009 (0.0004)	0.030 (0.0012)			0.060 (0.0024)
E ID 101	11.106 (0.4372)	11.117 (0.4377)				11.132 (0.4383)	
E OD 101	12.722 (0.5009)	12.733 (0.5013)			12.712 (0.5005)		
			-0.018 -(0.0007)	0.019 (0.0008)			1)
E ID 100	12.715 (0.5006)	12.741 (0.5016)				1)	

Fits and Clearances (Ref. Fig. 607)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
E OD 99	11.087 (0.4365)	11.097 (0.4369)			11.073 (0.4359)		
			0.019 (0.0007)	0.047 (0.0019)			0.086 (0.0034)
E ID 98	11.116 (0.4376)	11.134 (0.4383)				11.159 (0.4393)	
E OD 97	7.912 (0.3115)	7.925 (0.3120)			7.894 (0.3108)		
			0.002 (0.0001)	0.024 (0.0009)			0.048 (0.0019)
E ID 96	7.927 (0.3121)	7.936 (0.3124)				7.942 (0.3127)	
E OD 96	9.546 (0.3758)	9.555 (0.3762)			9.537 (0.3755)		
			-0.015 -(0.0006)	0.017 (0.0007)			1)
E ID 95	9.540 (0.3756)	9.563 (0.3765)				1)	
E OD 96	9.546 (0.3758)	9.555 (0.3762)			9.535 (0.3754)		
			-0.002 -(0.0001)	0.022 (0.0009)			0.044 (0.0017)
E ID 98	9.553 (0.3761)	9.568 (0.3767)				9.589 (0.3771)	
E OD 97	7.912 (0.3115)	7.925 (0.3120)			7.894 (0.3108)		
			0.002 (0.0001)	0.024 (0.0009)			0.048 (0.0019)
E ID 94	7.927 (0.3121)	7.936 (0.3124)				7.942 (0.3127)	

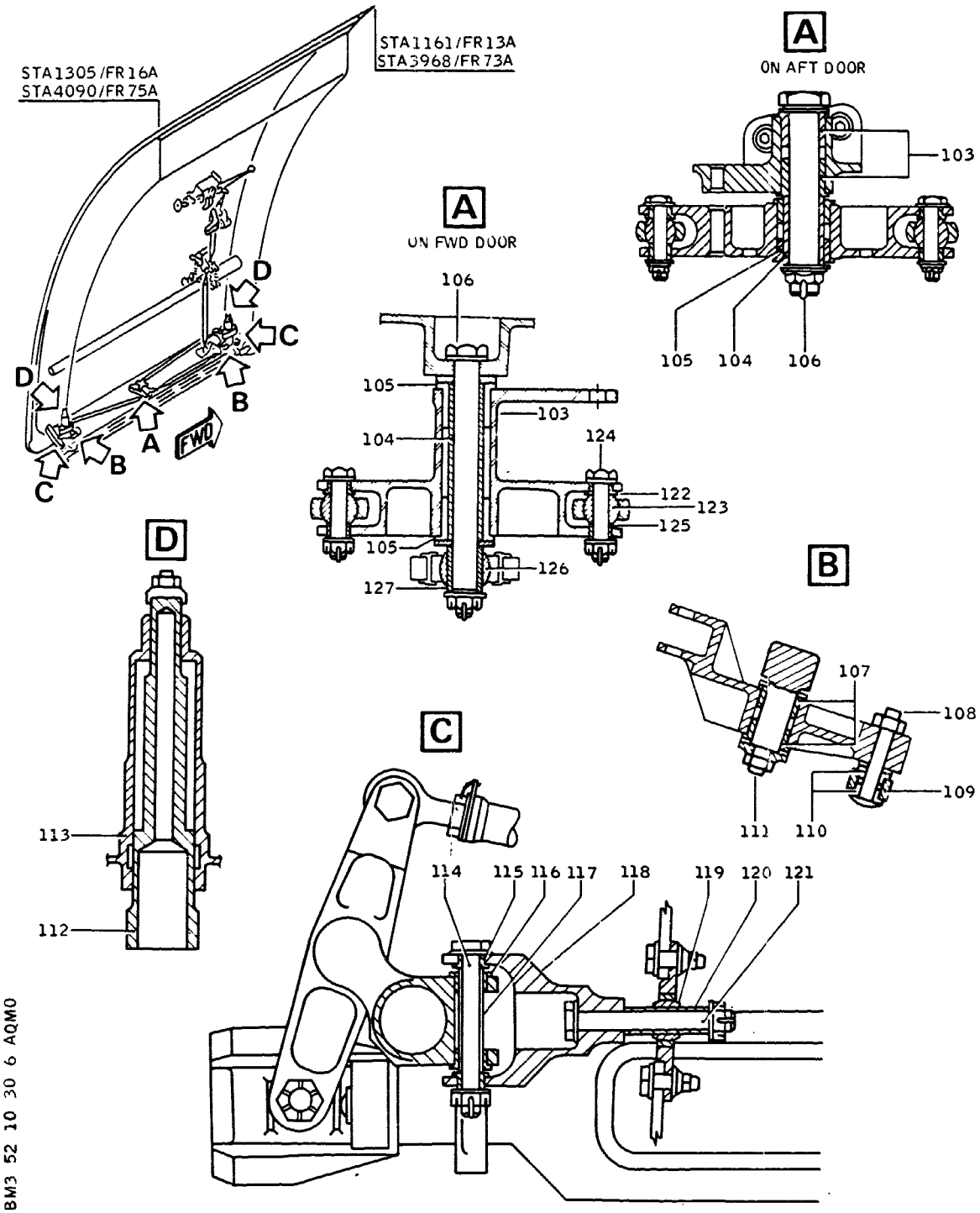
Fits and Clearances
(Ref. Fig. 607)
(Ref. Fig. 609)

**** ON FWD AND AFT PASSENGER/CREW DOORS**

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
E OD 94	9.546 (0.3758)	9.555 (0.3762)			9.535 (0.3754)		
			-0.002 -(0.0001)	0.022 (0.0009)			0.044 (0.0017)
E ID 98	9.553 (0.3761)	9.568 (0.3767)				9.579 (0.3771)	

**** ON AFT PASSENGER/CREW DOORS**

A OD 106	12.674 (0.4990)	12.687 (0.4995)			12.658 (0.4983)		
			0.013 (0.0005)	0.045 (0.0018)			0.086 (0.0034)
A ID 104	12.700 (0.5000)	12.719 (0.5007)				12.744 (0.5017)	
A OD 104	15.874 (0.6250)	15.887 (0.6255)			15.867 (0.6247)		
			0.006 (0.0002)	0.044 (0.0017)			1)
A ID 105	15.893 (0.6257)	15.918 (0.6267)				1)	
A OD 106	12.674 (0.4990)	12.687 (0.4995)			12.658 (0.4983)		
			0.013 (0.0005)	0.045 (0.0018)			0.086 (0.0034)
A ID 103	12.700 (0.5000)	12.719 (0.5007)				12.744 (0.5017)	



Bellcrank Unit (Middle) and Linkage Guides
Figure 609

Fits and Clearances (Ref. Fig. 607, 609)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B OD 111	12.722 (0.5009)	12.733 (0.5013)			12.713 (0.5005)		
			-0.018 -(0.0007)	0.019 (0.0007)			0.038 (0.0015)
B ID 107	12.715 (0.5006)	12.741 (0.5016)				12.751 (0.5020)	

Fits and Clearances (Ref. Fig. 609)
** ON FWD PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm (in.) Min.	Original Mfg Limits: Dimension mm (in.) Max.	Original Mfg Limits: Assy. Clearance mm (in.) Min.	Original Mfg Limits: Assy. Clearance mm (in.) Max.	In-Service Wear Limits: Dimension Limits mm (in.) Min.	In-Service Wear Limits: Dimension Limits mm (in.) Max.	In-Service Wear Limits: Max. Allow. clear mm (in.)
A OD 106	9.489 (0.3736)	9.502 (0.3741)			9.470 (0.3728)		
			0.015 (0.0006)	0.037 (0.0014)			0.074 (0.0029)
A ID 104 127	9.517 (0.3747)	9.526 (0.3750)				9.544 (0.3757)	
A OD 104	12.722 (0.5009)	12.733 (0.5013)			12.716 (0.5006)		
			-0.018 -(0.0007)	0.019 (0.0007)			0.030 (0.0012)
A ID 105	12.715 (0.5006)	12.741 (0.5016)				12.746 (0.5018)	
A OD 127	12.674 (0.4990)	12.687 (0.4995)			12.662 (0.4985)		
			0.000 (0.0000)	0.026 (0.0010)			0.050 (0.0020)
A ID 126	12.687 (0.4995)	12.700 (0.5000)				12.712 (0.5005)	
A OD 122 125	8.495 (0.3344)	8.486 (0.3341)			8.485 (0.3340)		
			0.014 (0.0005)	0.020 (0.0008)			0.040 (0.0016)
A ID 103	8.500 (0.3346)	8.515 (0.3352)				8.525 (0.3356)	
A OD 124	6.324 (0.2490)	6.337 (0.2495)			6.312 (0.2485)		
			0.005 (0.0002)	0.027 (0.0011)			0.050 (0.0020)
A ID 125 122	6.342 (0.2497)	6.351 (0.2500)				6.362 (0.2505)	

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A OD 124	6.324 (0.2490)	6.337 (0.2495)			6.312 (0.2485)		
			0.000 (0.0000)	0.026 (0.0010)			0.052 (0.0020)
A ID 123	6.337 (0.2495)	6.350 (0.2500)				6.364 (0.2505)	

Fits and Clearances (Ref. Fig. 609)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm (Min.)	Original Mfg Limits: Dimension mm (Max.)	Original Mfg Limits: Dimension (in.) (Min.)	Original Mfg Limits: Dimension (in.) (Max.)	Original Mfg Limits: Assy. Clearance mm (Min.)	Original Mfg Limits: Assy. Clearance mm (Max.)	Original Mfg Limits: Assy. Clearance (in.) (Min.)	Original Mfg Limits: Assy. Clearance (in.) (Max.)	In-Service Wear Limits: Dimension Limits mm (Min.)	In-Service Wear Limits: Dimension Limits mm (Max.)	In-Service Wear Limits: Dimension Limits (in.) (Min.)	In-Service Wear Limits: Dimension Limits (in.) (Max.)	In-Service Wear Limits: Max. Allow. clear mm (in.)
B OD 108	7.912	7.925	(0.3115)	(0.3120)					7.896		(0.3109)		
					0.005	0.033	(0.0002)	(0.0013)					0.070 (0.0028)
B ID 110	7.930	7.945	(0.3122)	(0.3128)						7.966		(0.3136)	
B OD 110	10.966	10.984	(0.4317)	(0.4324)					10.942		(0.4308)		
					0.016	0.052	(0.0006)	(0.0020)					0.100 (0.0039)
B ID 109	11.000	11.018	(0.4331)	(0.4338)						11.042		(0.4347)	
D OD 112	12.966	12.984	(0.5105)	(0.5112)					12.940		(0.5094)		
					0.016	0.052	(0.0006)	(0.0020)					0.100 (0.0039)
D ID 113	13.000	13.018	(0.5118)	(0.5125)						13.040		(0.5134)	
D OD 112	25.980	25.993	(1.0228)	(1.0233)					25.960		(1.0220)		
					0.007	0.041	(0.0003)	(0.0016)					0.092 (0.0036)
D ID 113	26.000	26.021	(1.0236)	(1.0244)						26.052		(1.0256)	
C OD 114	6.312	6.337	(0.2485)	(0.2495)					6.288		(0.2476)		
					0.005	0.047	(0.0002)	(0.0019)					0.095 (0.0037)
C ID 117	6.342	6.359	(0.2497)	(0.2504)						6.383		(0.2513)	

Fits and Clearances (Ref. Fig. 609)

** ON FWD AND AFT PASSENGER/CREW DOORS

Detail and item No.	Original Mfg Limits: Dimension mm (Min.)	Original Mfg Limits: Dimension mm (Max.)	Original Mfg Limits: Assy. Clearance mm (Min.)	Original Mfg Limits: Assy. Clearance mm (Max.)	In-Service Wear Limits: Dimension Limits mm (Min.)	In-Service Wear Limits: Dimension Limits mm (Max.)	In-Service Wear Limits: Max. Allow. clear mm (in.)
C OD 117	7.956 (0.3132)	7.965 (0.3136)			7.952 (0.3131)		
			-0.015 -(0.0006)	0.017 (0.0007)			0.025 (0.0010)
C ID 116	7.950 (0.3130)	7.973 (0.3139)				7.977 (0.3141)	
C OD 114	7.956 (0.3132)	7.965 (0.3136)			7.952 (0.3131)		
			-0.002 -(0.0001)	0.017 (0.0007)			0.025 (0.0010)
C ID 115	7.963 (0.3135)	7.973 (0.3139)				7.977 (0.3141)	
C OD 115	7.956 (0.3132)	7.965 (0.3136)			7.959 (0.3133)		
			-0.002 -(0.0001)	0.022 (0.0009)			0.040 (0.0016)
C ID 118	7.963 (0.3135)	7.978 (0.3141)				7.999 (0.3149)	
C OD 121	6.324 (0.2490)	6.337 (0.2495)			6.311 (0.2485)		
			0.005 (0.0002)	0.027 (0.0011)			0.053 (0.0021)
C ID 120	6.342 (0.2497)	6.351 (0.2500)				6.364 (0.2506)	
C OD 120	7.890 (0.3106)	7.912 (0.3115)			7.876 (0.3101)		
			0.012 (0.0005)	0.047 (0.0019)			1)
C ID 119	7.924 (0.3120)	7.937 (0.3125)				1)	

Printed in France

FWD, AFT DOOR LATCH AND STOP FITTINGS - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

WARNING : TRICHLOROETHANE (MATERIAL NO. 11-004) IS DANGEROUS AND A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT. AVOID INHALING FUMES.

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Reason for the Job

A. Removal for replacement of:

NOTE : Item numbers correspond with operations in Paras. 3.B and 3.D.

(1)Door Stop Fitting
(2)Adjustable Bolt for Door Stop Fitting
(3)Fuselage Stop Fitting
(4)Fitting with Guide Roller
(5)Girt Bar Fitting
(6)Lowering Stop
(7)Roller Fitting
(8)Latch Fitting and Roller
(9)Upper Guide Fitting
(10)Lower Guide Fitting
(11)Guide Arm Fitting
(12)Upper Support Arm Fitting
(13)Lower Support Arm Fitting

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.6 to 5.2 m (15 to 17 ft.)
B.	Torque Wrench, 0.0 to 2.5 m.daN (0.0 to 225 lbf.in.)
C.	Cotter Pins
D. Material No. 04-004	Common Greases (Ref. 20-31-00)
E. Material No. 05-002	Special Materials (Ref. 20-31-00)
F. Material No. 05-027	Special Materials (Ref. 20-31-00)
G. Material No. 09-013	Sealants (Ref. 20-31-00)
H. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
I. Material No. 16-001	Structure Paints (Ref. 20-31-00)
J. Material No. 16-002	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 25-23-41, P. Block 401	Door Frame Lining
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-12, P. Block 501	FWD, AFT Door Suspension
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-11-11, P. Block 401	FWD Passenger/Crew Door
- 52-11-12, P. Block 401	FWD Door Suspension
- 52-13-11, P. Block 401	AFT Passenger/Crew Door
- 52-13-12, P. Block 401	AFT Door Suspension

3. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Remove either container with double escape slide (Ref. 25-61-21, P. Block 401), or container with slide/raft (Ref. 25-61-22, P. Block 401), when necessary.
(4)Remove corresponding door lining and insulation (Ref. 52-10-13, P. Block 401).
(5)Remove corresponding door frame linings when necessary (Ref. 25-23-41, P. Block 401).

B. Removal
(1)Door Stop Fitting (11)
(Ref. Fig. 401)

** ON FWD PASSENGER/CREW DOORS

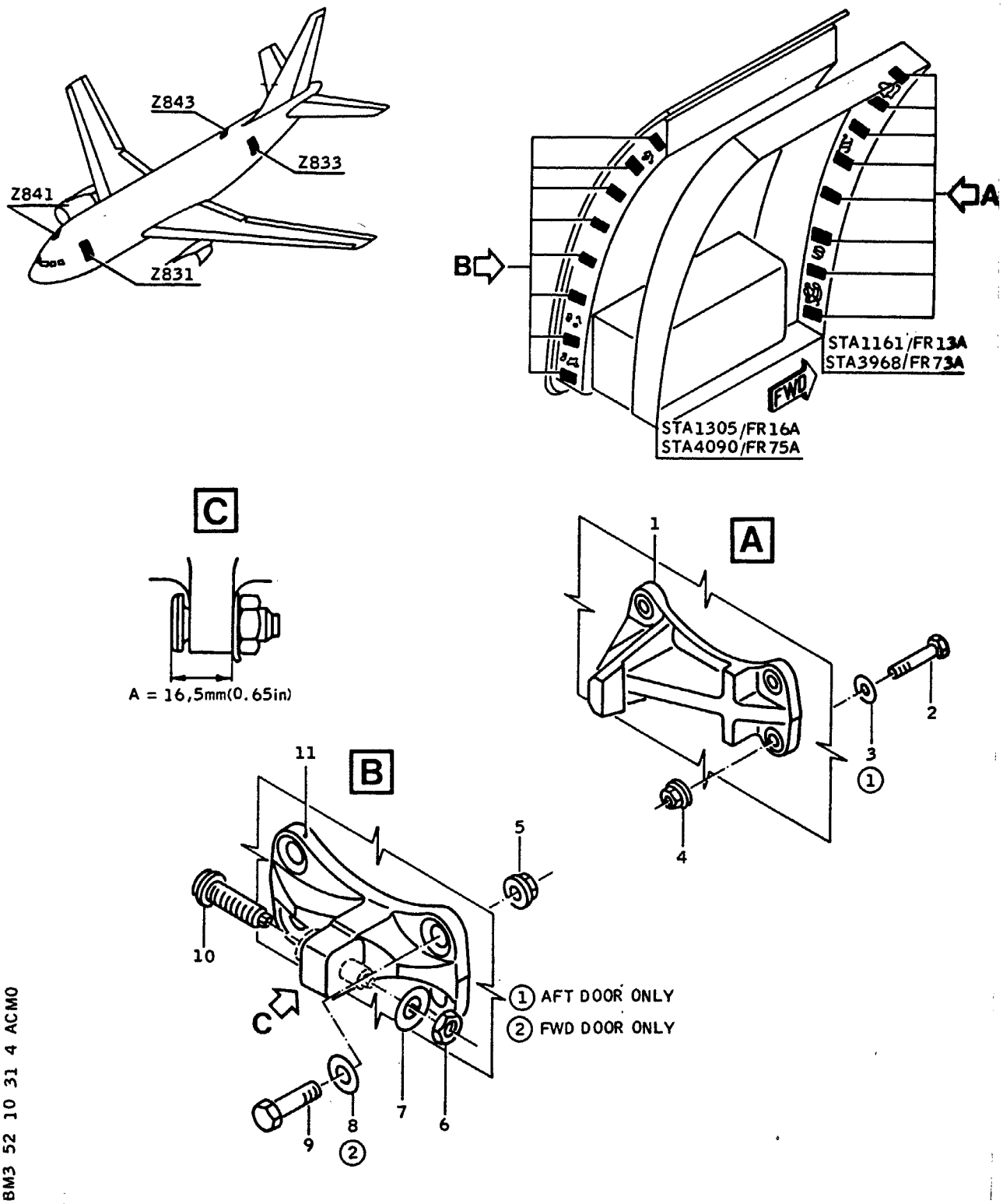
(a)Remove nuts (5), washers (8) and bolts (9).

** ON AFT PASSENGER/CREW DOORS

(a)Remove nuts (5) and bolts (9).

** ON FWD AND AFT PASSENGER/CREW DOORS

(b)Remove door stop fitting (11) from door frame.
(2)Adjustable Bolt (10) for Door Stop Fitting (11) (Ref. Fig. 401)
(a)Bend off locking plate (7) and remove nut (6).
(b)Remove bolt (10) and locking plate (7) from door stop fitting (11).
(3)Fuselage Stop Fitting (1) (Ref. Fig. 401)
(a)Remove nuts (4).
(b)Remove bolts (2) and fuselage stop fitting (1) from fuselage door frame.



Door and Fuselage Stop Fittings
Figure 401

(4)Fitting (24) with Guide Roller (21)
(Ref. Fig. 402)
(a)Remove nuts (25).
(b)Remove fitting (24) with guide roller (21) and bolts (23).
(c)Remove guide roller (21) from fitting (24) as follows:
1 Remove cotter pin (28).
2 Remove nut (27) and washer (26).
3 Remove bolt (20), guide roller (21) and flange bush (22).
(5)Girt Bar Fitting (29) (Ref. Fig. 402)
NOTE : Mark position of girt bar fitting (29) and serrated plate (32).

** ON FWD PASSENGER/CREW DOORS

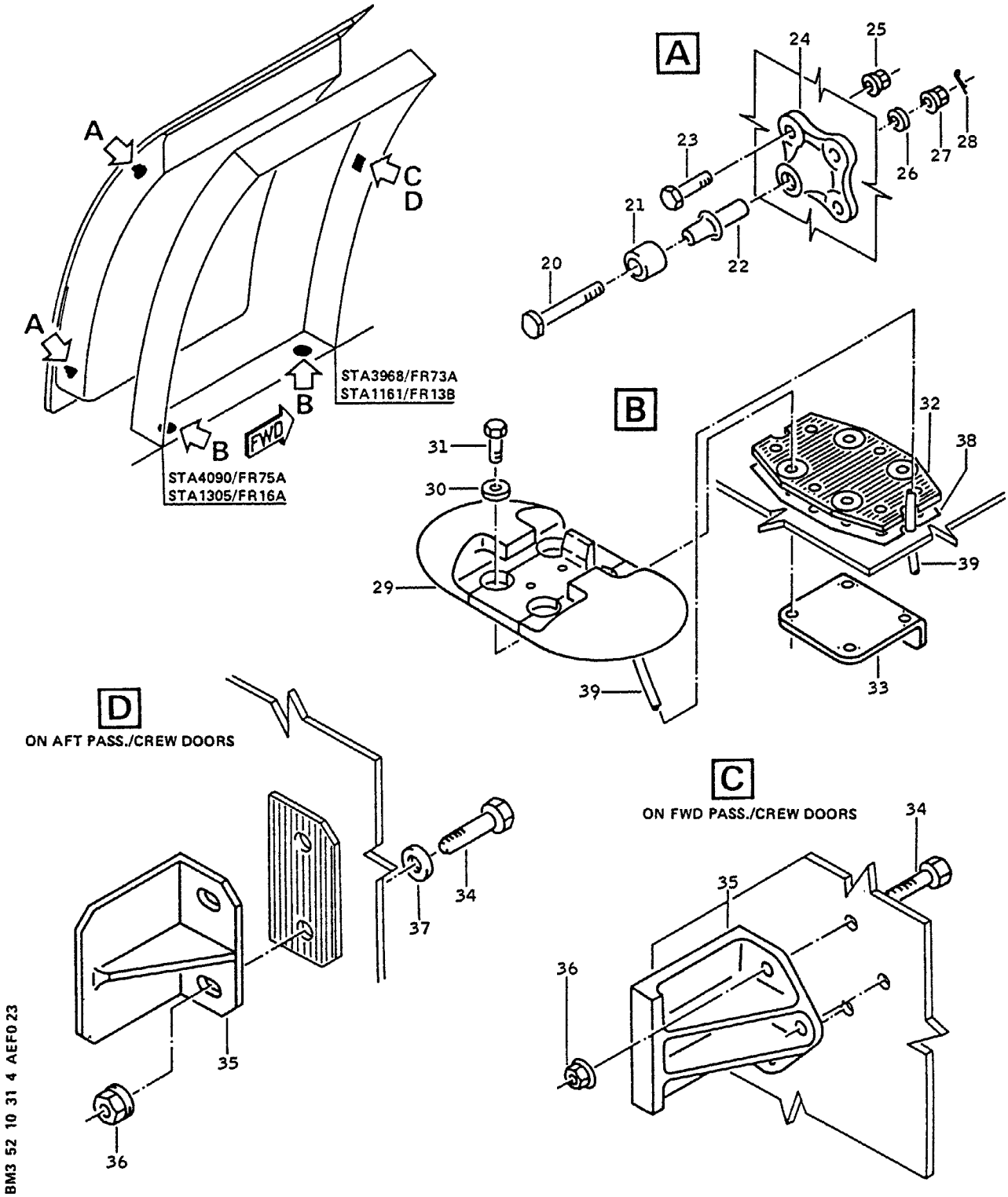
(a)With nut plate (33) held in position, remove bolts (31) and washers (30).
NOTE : Nut plate (33) is accessible from avionics compartment.
(b)Disconnect heating system harness (39) from control unit.
NOTE : On FWD door, control unit installed in electronic compartment.
(c)Remove girt bar fitting (29).
(d)Cap ends of harness (39) and connection to control unit.

** ON AFT PASSENGER/CREW DOORS

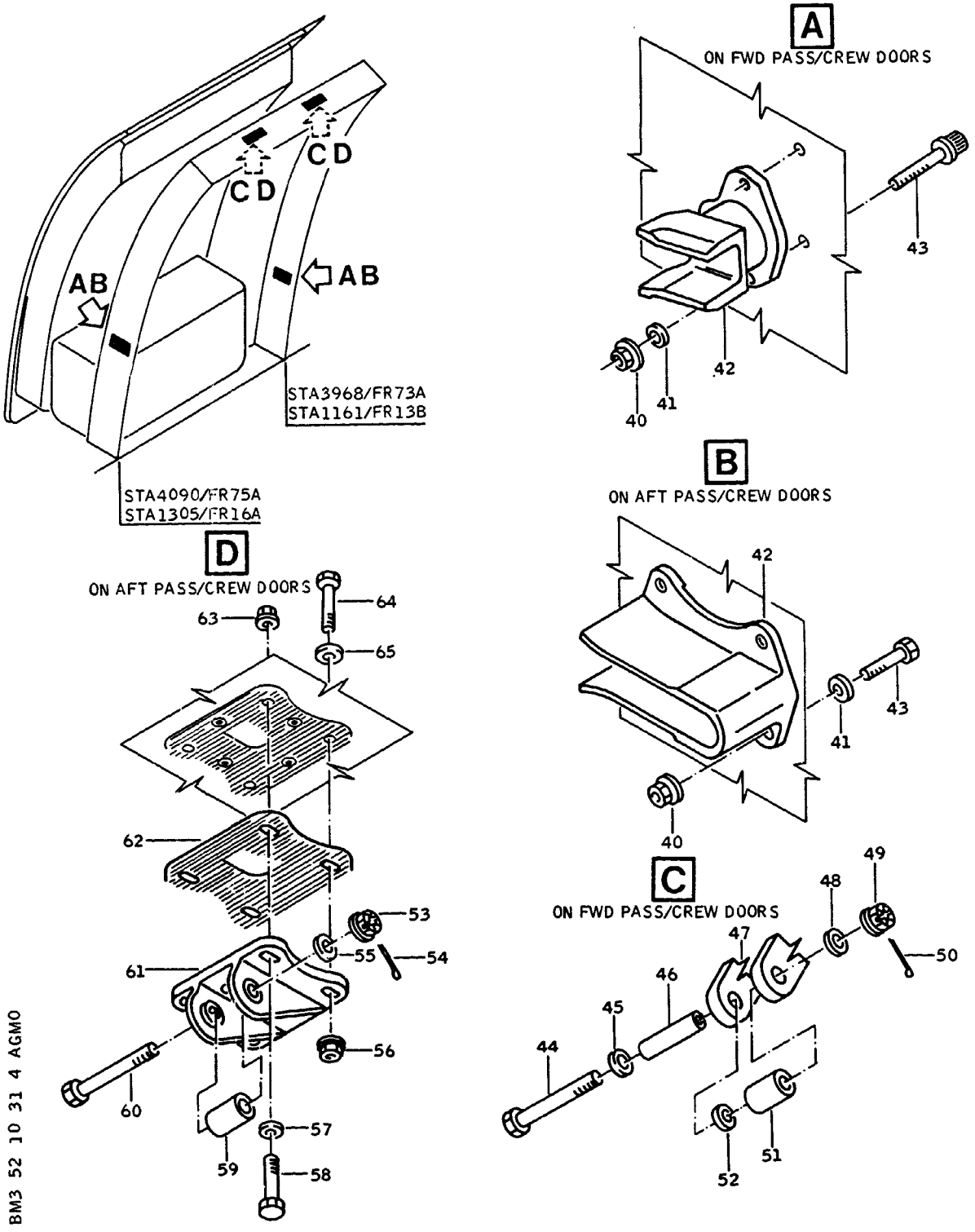
(a)Open AFT cargo compartment door and fuselage tail section access door 162AZ.
(b)Disconnect heating system harness (39) from control unit.
NOTE : On AFT door, control unit installed under floor in door area.
CAUTION : SECURE NUT PLATE (33) TO PREVENT IT FROM FALLING INTO AN INACCESSIBLE AREA.
(c)Remove bolts (31), washers (30) and girt bar fitting (29).
(d)Remove nut plate (33).
(e)Cap ends of harness (39) and connection to control unit.

** ON FWD AND AFT PASSENGER/CREW DOORS

(6)Lowering Stop (35) (Ref. Fig. 402)
NOTE : Mark position of lowering stop (35).
(a)Remove nuts (36) and remove lowering stop (35).
(b)Remove bolts (34) and washers (37).
(7)Roller Fitting (42)
(Ref. Fig. 403)
(a)Remove nuts (40) and remove roller fitting (42).
(b)Remove bolts (43) and washers (41).



Fitting with Guide Roller, Girt Bar Fitting
and Lowering Stop
Figure 402



Roller Fitting and Latch Fitting with Roller
Figure 403

** ON FWD PASSENGER/CREW DOORS

(8)Latch Fitting (47) and Roller (51) (Ref. Fig. 403)
(a)Latch Fitting (47)
NOTE : Latch fitting (47) is part of the fuselage structure and cannot be removed.
(b)Remove roller (51) from latch fitting (47) as follows:
1 Remove cotter pin (50).
2 Remove nut (49) and washer (48).
3 Remove bolt (44), washer (45) and spacer (46).
4 Remove roller (51) and washer (52).

** ON AFT PASSENGER/CREW DOORS

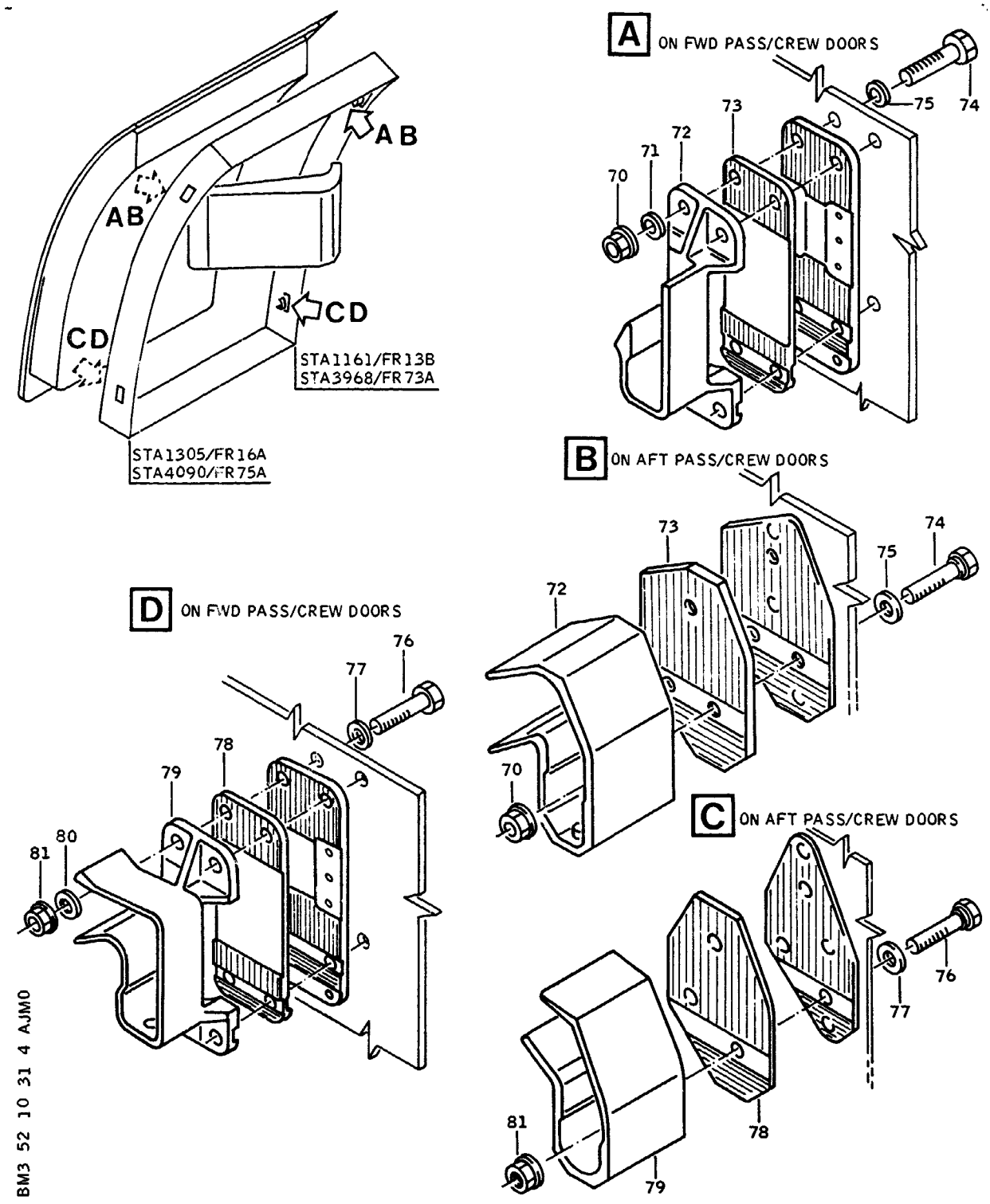
(8)Latch Fitting (61) and Roller (59) (Ref. Fig. 403)
NOTE : Mark position of latch fitting (61) and serrated plate (62).
(a)Remove nuts (56) and (63).
(b)Remove bolts (58), washers (57) and latch fitting (61) with serrated plate (62).
(c)Remove bolts (64) and washers (65).
(d)Remove roller (59) as follows:
1 Remove cotter pin (54).
2 Remove nut (53) and washer (55).
3 Remove bolt (60) and roller (59).

** ON FWD AND AFT PASSENGER/CREW DOORS

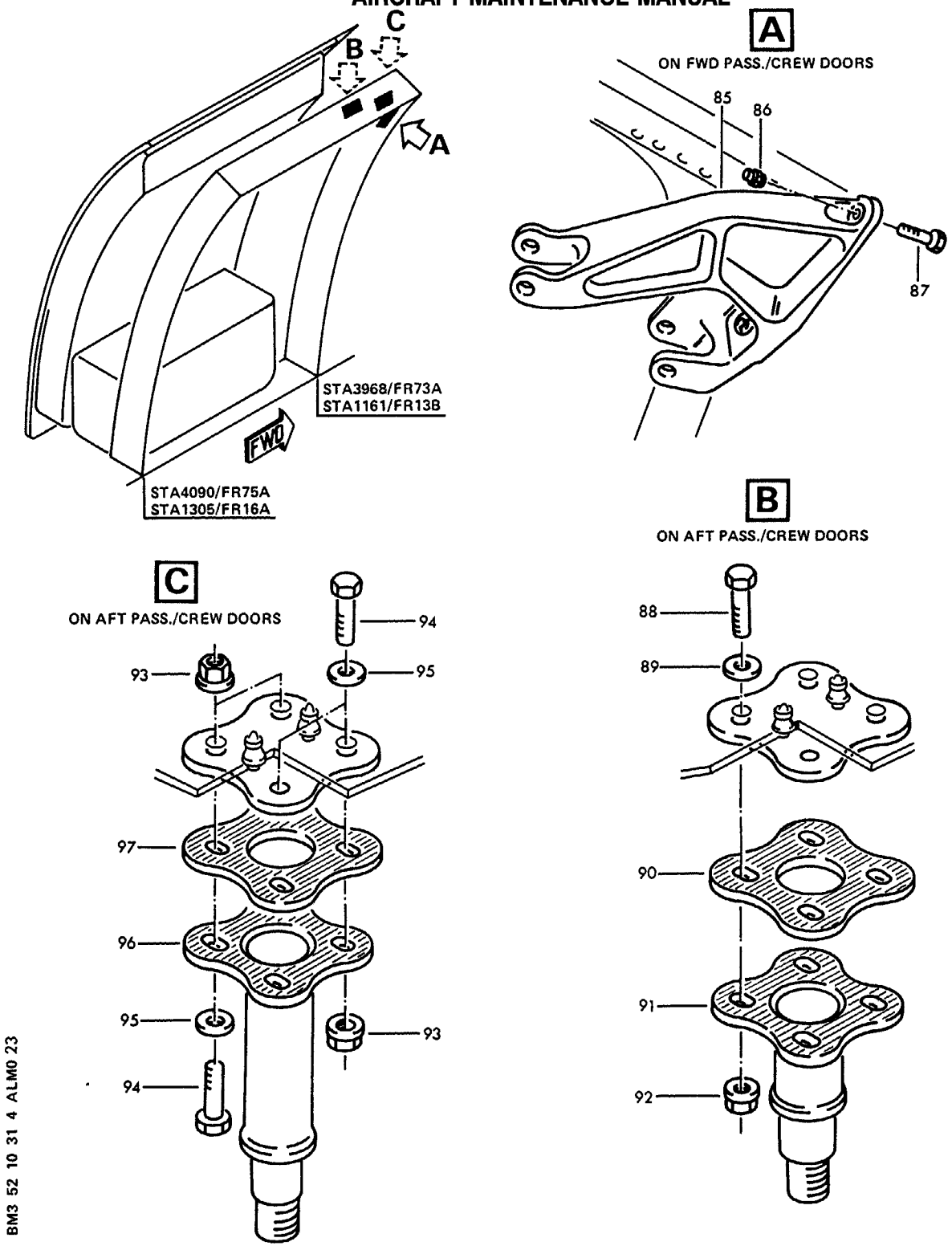
(9)Upper Guide Fitting (72)
(Ref. Fig. 404)
NOTE : Mark position of upper guide fitting (72) and serrated plate (73).

** ON FWD PASSENGER/CREW DOORS

(a)Remove nuts (70) and washers (71).
(b)Remove upper guide fitting (72) and serrated plate (73).
(c)Remove bolts (74) and washers (75).
(10)Lower Guide Fitting (79) (Ref. Fig. 404)
NOTE : Mark position of lower guide fitting (79) and serrated plate (78).
(a)Remove nuts (81) and washers (80).
(b)Remove lower guide fitting (79) and serrated plate (78).
(c)Remove bolts (76) and washers (77).
(11)Guide Arm Fitting (85)
(Ref. Fig. 405)
(a)Remove upper and lower guide arm from guide arm fitting (85) (Ref. 52-11-12, P. Block 401).
(b)Remove nuts (86) and guide arm fitting (85).
(c)Remove bolts (87).



Upper and Lower Guide Fitting
Figure 404



Guide Arm Fittings
Figure 405

** ON AFT PASSENGER/CREW DOORS

(a)Remove nuts (70).
(b)Remove upper guide fitting (72) and serrated plate (73).
(c)Remove bolts (74) and washers (75).

(10)Lower Guide Fitting (79) (Ref. Fig. 404)

NOTE : Mark position of lower guide fitting (79) and serrated plate (78).

(a)Remove nuts (81).
(b)Remove lower guide fitting (79) and serrated plate (78).
(c)Remove bolts (76) and washers (77).

(11)Guide Arm Fitting (91),(96) (Ref. Fig. 405)

NOTE : Mark position of guide arm fitting (91,96) and serrated plates (90),(97).

(a)Remove upper and lower guide arm from guide arm fittings (91),(96) (Ref. 52-13-12, P. Block 401).
(b)Remove nuts (92),(93).
(c)Remove bolts (88),(94), washers (89),(95), guide arm fittings (91),(96) and serrated plates (90),(97).

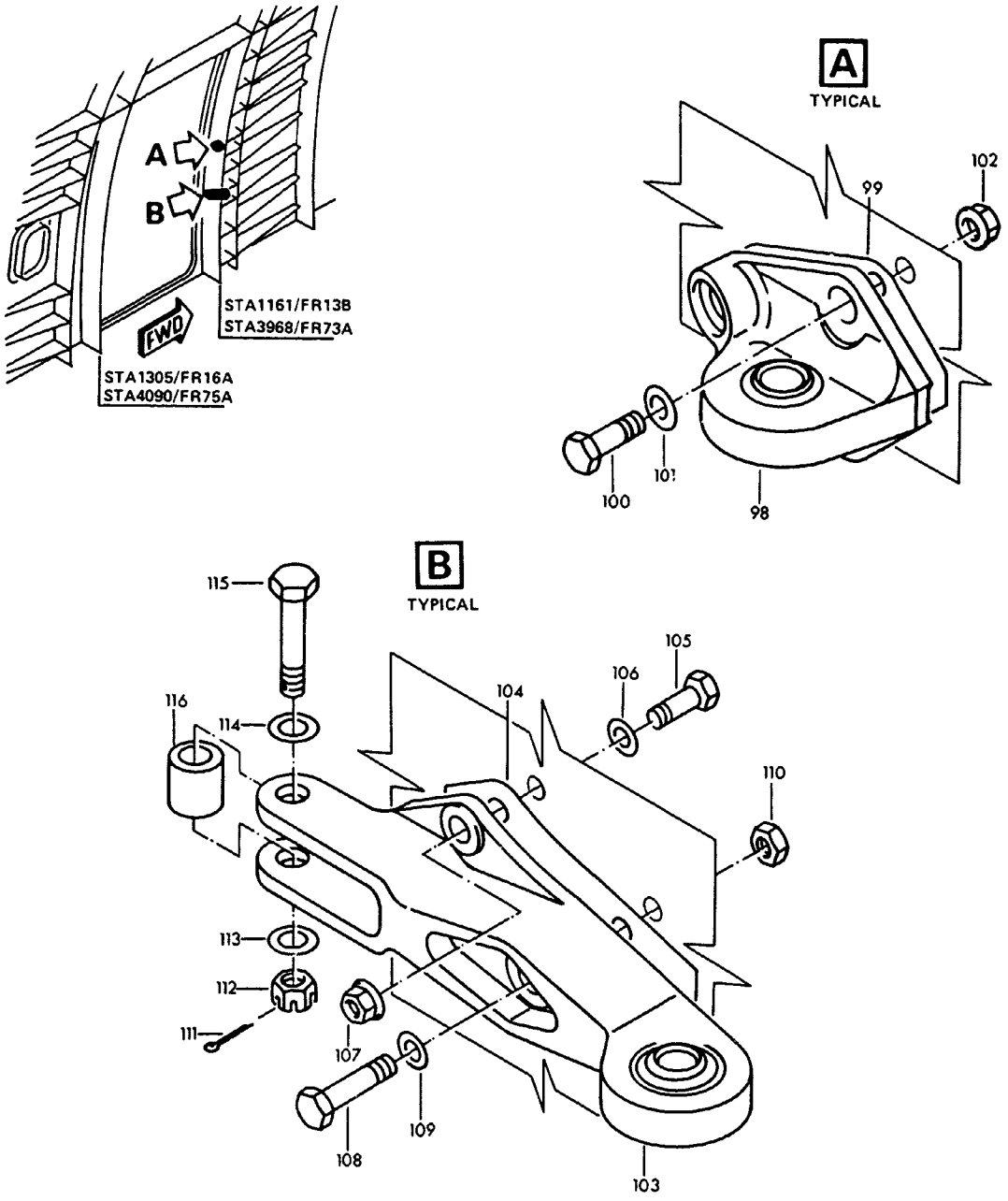
** ON FWD AND AFT PASSENGER/CREW DOORS

(12)Upper Support Arm Fitting (98)
(Ref. Fig. 406)

(a)Remove passenger/crew door (Ref. 52-11-11, P. Block 401 or 52-13-11, P. Block 401).
(b)Remove door suspension (Ref. 52-11-12, P. Block 401 or 52-13-12, P. Block 401).
(c)Remove nuts (102), bolts (100) and washers (101).
(d)Remove upper support arm fitting (98) and plate (99).

(13)Lower Support Arm Fitting (103) (Ref. Fig. 406)

(a)Remove passenger/crew door (Ref. 52-11-11, P. Block 401 or 52-13-11, P. Block 401).
(b)Remove door suspension (Ref. 52-11-12, P. Block 401 or 52-13-12, P. Block 401).
(c)Remove cotter pin (111), nut (112), washer (113), bolt (115) and washer (114).
(d)Remove roller (116).
(e)Remove nuts (107),(110), bolts (105),(108) and washers (106),(109).
(f)Remove lower support arm fitting (103) and plate (104).



BM3 52 10 31 4 AMM0 -11

Upper and Lower Support Arm Fittings
Figure 406

C. Preparation of Replacement Component

WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS.

(1)Clean contact areas of latch and stop fittings and structure with cleaning agent (Material No. 11-004).

(2)Check mounting holes for damage.

(3)Before installation , apply sealant (Material No. 09-013) to attachment bolts of latch and stop fittings.

(4)Make certain that attachment fittings or serrated plates have no sharp edges that could cut into the surface protection (chamfer sharp edges where necessary).

(5)Make certain that the PTFE insulating plate (38) below the serrated plate (32) is not damaged (Ref. Fig. 402).

(6)Make certain that the harness (39) for girt bar heating is not damaged (Ref. Fig. 402).

D. Installation

CAUTION : TO AVOID DAMAGE TO SERRATIONS MAKE CERTAIN THAT SERRATED PARTS ARE CORRECTLY MATED BEFORE TIGHTENING BOLTS.

(1)Door Stop Fitting (11) (Ref. Fig. 401)

(a)Inspect attachment points of door stop fitting (11) for structural cracks.

(b)Apply sealant (Material No. 09-013) to contact area of door stop fitting (11).

** ON FWD PASSENGER/CREW DOORS

(c)Position door stop fitting (11) and install bolts (9) and washers (8).

** ON AFT PASSENGER/CREW Doors

(c)Position door stop fitting (11) and install bolts (9).

** ON FWD AND AFT PASSENGER/CREW DOORS

(d)Install nuts (5) and TORQUE to between 0.7 and 0.8 m.daN (62 and 71 lbf.in.).

(2)Adjustable Bolt (10) for Door Stop Fitting (11) (Ref. Fig. 401)

(a)Install adjustable bolt (10) to door stop fitting (11) and adjust to give basic setting "A" = 16.5 mm (0.65 in.).

(b)Install locking plate (7) and nut (6).

(c)Carry out adjustment (Ref. 52-10-11, P. Block 501, Upper and lower guide fittings/stop fittings).

(d)TORQUE nuts (6) to between 2.0 and 2.2 m.daN (177 and 195 lbf.in.).

(e)Safety nut (6) with locking plate (7).

(3)Fuselage Stop Fitting (1) (Ref. Fig. 401)
(a)Apply sealant (Material No. 09-013) to contact area of fuselage stop fitting (1).

** ON FWD PASSENGER/CREW DOORS

(b)Position fuselage stop fitting (1) and install bolts (2).

** ON AFT PASSENGER/CREW DOORS

(b)Position fuselage stop fitting (1) and install bolts (2) and washers (3).

** ON FWD AND AFT PASSENGER/CREW DOORS

(c)Install nuts (4) and TORQUE to between 0.7 and 0.8 m.daN (62 and 71 lbf.in.) (Ref. 52-10-11, P. Block 501).
(4)Fitting (24) with Guide Roller (21) (Ref. Fig. 402)
(a)Apply Mastinox (Material No. 05-002) to long end of flange bush (22).
(b)Install flange bush (22) to fitting (24).
(c)Install bolt (20), guide roller (21), washer (26) and nut (27).
(d)TORQUE nut (27) to max. 0.35 m.daN (31 lbf.in.) and back off to next cotter pin hole.
(e)Install cotter pin (28).
(f)Apply sealant (Material No. 09-013) to contact area of fitting (24).
(g)Install fitting (24) with guide roller (21) and bolts (23).
(h)Install nuts (25) and TORQUE to between 0.7 and 0.8 m.daN (62 and 71 lbf.in.).
(5)Girt Bar Fitting (29) (Ref. Fig. 402)
(a)Remove end caps from harness (39) and connection at control unit.
CAUTION : MAKE CERTAIN THAT HARNESS (39) IS CLEAR OF SERRATED PLATE (32).
(b)Position girt bar fitting (29) on serrated plate (32).
NOTE : Observe position marks made before removal.
(c)Position nut plate (33).
(d)Install bolts (31) with washers (30).

** ON FWD PASSENGER/CREW DOORS

(e)Adjust girt bar fitting (29) (Ref. 52-10-11, P. Block 501).
(f)Connect harness (39) to control unit in electronics compartment.
(g)TORQUE bolts (31) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(h)Apply sealant (Material No. 09-013) around girt bar fitting (29)/ structure contact area and around bolt heads (31) to form seal.

** ON AFT PASSENGER/CREW DOORS

(e)Close fuselage tail section access door 162AZ and AFT cargo compartment door.
(f)Adjust girt bar fitting (29) (Ref. 52-10-11, P. Block 501).
(g)Connect harness (39) to control unit under floor in door area.
(h)TORQUE bolts (31) to between 0.45 and 0.6 m.daN (40 and 44 lbf.in.).
(i)Apply sealant (Material No. 09-013) around girt bar fitting (29)/ structure contact area and around bolt heads (31) to form seal.

** ON FWD AND AFT PASSENGER/CREW DOORS

(6)Lowering Stop (35) (Ref. Fig. 402)

** ON FWD PASSENGER/CREW DOORS

(a)Apply sealant (Material No. 09-013) to contact area of lowering stop (35).
NOTE : Lowering stop (35) is not serrated and not adjustable.
(b)Install lowering stop (35) with bolts (34).
(c)Install nuts (36) and TORQUE to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(7)Roller Fitting (42) (Ref. Fig. 403)
(a)Apply sealant (Material No. 09-013) to contact area of roller fitting (42).
(b)Insert bolts (43) and install roller fitting (42).
(c)Install washers (41) and nuts (40).
(d)TORQUE nuts (40) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(8)Latch Fitting (47) and Roller (51) (Ref. Fig. 403)
(a)Install roller (51) to latch fitting (47) as follows:
1 Position roller (51) and washer (52) to latch fitting (47).
2 Insert spacer (46) and bolt (44) with washer (45).
3 Install washer (48) and nut (49).
4 Tighten nut (49) and secure with cotter pin (50).
(9)Upper Guide Fitting (72) (Ref. Fig. 404)
(a)Position upper guide fitting (72) with serrated plate (73) and install bolts (74), washers (75),(71) and nuts (70).
NOTE : Observe position marks made before removal.
(b)Carry out adjustment (Ref. 52-10-11, P. Block 501).
(c)TORQUE nuts (70) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(10)Lower Guide Fitting (79) (Ref. Fig. 404)
(a)Position lower guide fitting (79) with serrated plate (78) and install bolts (76), washers (77),(80) and nuts (81).
NOTE : Observe position marks made before removal.
(b)Carry out adjustment (Ref. 52-10-11, P. Block 501).
(c)TORQUE nuts (81) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).
(11)Guide Arm Fitting (85) (Ref. Fig. 405)
(a)Position guide arm fitting (85) and install bolts (87).
(b)Install nuts (86) and tighten.
(c)Install upper and lower guide arm to guide arm fitting (85) (Ref. 52-11-12, P. Block 401).

**ON AFT PASSENGER/CREW DOORS

(a)Install lowering stop (35) with bolts (34) and washers (37).
NOTE : Observe position marks made before removal.
(b)Install nuts (36) and TORQUE to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.). (For adjustment ref. to 52-10-11, P. Block 501).

(7)Roller Fitting (42) (Ref. Fig. 403)
(a)Apply sealant (Material No. 09-013) to contact area of roller fitting (42).
(b)Install roller fitting (42) with bolts (43) and washers (41).
(c)Install nuts (40) and TORQUE to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).

(8)Latch Fitting (61) and Roller (59) (Ref. Fig. 403)
(a)Roller (59).
1 Apply grease (Material No. 04-004) to bolt (60) and roller (59).
2 Position roller (59) to latch fitting (61) and install bolt (60), washer (55) and nut (53).
3 Tighten nut (53) so that axial clearance of the joint is 0.1 mm (0.0039 in.).
4 Install cotter pin (54).
(b)Latch Fitting (61)
1 Insert bolts (64) with washers (65).
2 Apply grease (Material No. 04-004) to serrated contact areas of latch fitting (61) and serrated plate (62).
3 Position latch fitting (61) and serrated plate (62) and install nuts (56).
4 Install bolts (58), washers (57) and nuts (63).
NOTE : Observe position marks made before removal.
5 Carry out adjustment (Ref. 52-10-11, P. Block 501).
6 TORQUE nuts (56),(63) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).

(9)Upper Guide Fitting (72) (Ref. Fig. 404)
(a)Apply grease (Material No. 04-004) to serrated contact areas of upper guide fitting (72) and serrated plate (73).
(b)Position upper guide fitting (72) with serrated plate (73) and install bolts (74), washers (75) and nuts (70).
NOTE : Observe position marks made before removal.
(c)Carry out adjustment (Ref. 52-10-11, P. Block 501).
(d)TORQUE nuts (70) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).

(10)Lower Guide Fitting (79) (Ref. Fig. 404)
(a)Apply grease (Material No. 04-004) to serrated contact areas of lower guide fitting (79) and serrated plate (78).
(b)Position lower guide fitting (79) with serrated plate (78) and install bolts (76), washers (77) and nuts (81).
NOTE : Observe position marks made before removal.
(c)Carry out adjustment (Ref. 52-10-11, P. Block 501).
(d)TORQUE nuts (81) to between 0.45 and 0.5 m.daN (40 and 44 lbf.in.).

(11)Guide Arm Fitting (91) and (96) (Ref. Fig. 405)
(a)Apply grease (Material No. 04-004) to serrated contact areas of guide arm fitting (91),(96).
(b)Position guide arm fitting (91),(96) and serrated plate (90),(97).
NOTE : Observe position marks made before removal.
(c)Apply grease (Material No. 04-004) to bolts (88),(94) and install bolts (88),(94), washers (89),(95) and nuts (92),(93).
(d)Install upper and lower guide arm to guide arm fitting (91),(96) (Ref. 52-13-12, P. Block 401) and carry out adjustment (Ref. 52-10-12, P. Block 501).
(e)Tighten nuts (92),(93).

** ON FWD AND AFT PASSENGER/CREW DOORS

(12)Upper Support Arm Fitting (98) (Ref. Fig. 406)
(a)Apply sealant (Material No. 09-013) to contact surface of upper support arm fitting (98).
(b)Position plate (99) and upper support arm fitting (98).
(c)Install bolts (100), washers (101) and nuts (102).
(d)Tighten nuts (102).
(e)Install door suspension (Ref. 52-11-12, P. Block 401 or 52-13-12, P. Block 401).
(f)Install passenger/crew door (Ref. 52-11-11, P. Block 401 or 52-13-11, P. Block 401).
(13)Lower Support Arm Fitting (103) (Ref. Fig. 406)
(a)Apply sealant (Material No. 09-013) to contact surface of lower support arm fitting (103).
(b)Position plate (104) and lower support arm fitting (103).
(c)Install bolts (105),(108), washers (106),(109) and nuts (107),(110).
(d)Tighten nuts (107),(110).
(e)Apply grease (Material No. 04-004) to bolt (115) and roller (116).
(f)Position roller (116) and install bolt (115), washers (114),(113) and nut (112).
(g)Tighten nut (112) and safety with cotter pin (111).
(h)Install door suspension (Ref. 52-11-12, P. Block 401 or 52-13-12, P. Block 401).
(i)Install passenger/crew door (Ref. 52-11-11, P. Block 401 or 52-13-11, P. Block 401).

E. Test
Not applicable.

F. Close-Up
(1)Apply polyurethane primer (Material No. 16-001) and polyurethane top coat (Material No. 16-002) to projecting thread ends and bolt heads.
(2)Apply bead of sealant (Material No. 09-013) around edges of installed latch and stop fittings.
(3)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(4)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(5)Install corresponding door lining and insulation (Ref. 52-10-13, P. Block 401).
(6)Install corresponding door frame linings where removed (Ref. 25-23-41, P. Block 401).
(7)Install either container with double escape slide (Ref. 25-61-21, P. Block 401) or container with slide-raft (Ref. 25-61-22, P. Block 401), when removed.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(8)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(9)Close door.
(10)Remove access platform.

WARNING : INSTALL ESCAPE SLIDE SAFETY PIN AND DISARM DOOR DAMPER AND EMERGENCY OPERATION CYLINDER PERCUSSION MECHANISM TO PREVENT INADVERTENT OPERATION DURING THE REMOVAL/INSTALLATION OF DOOR.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR FORWARD PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

1. Equipment and Materials

	ITEM	DESIGNATION
	A. 98A52108003001	Safety Pin Set - Emergency Control Handle
	B. 98A52108008001	Ballast Weight
R	C. 98A52008509000	Sling-Universal, Doors
	D.	Access Platform 4.5 m (15 ft.)
	E. Material No. 04-004	Common Greases (Ref. 20-31-00)
	F. Material No. 05-002	Special Materials (Ref. 20-31-00)
	G. Material No. 05-052	Special Materials (Ref. 20-31-00)
	H. Material No. 07-001	Lacquers (Ref. 20-31-00)
	J. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
	K.	Circuit Breaker Safety Clips
	Referenced Procedures	
	- 25-61-11, P. Block 401	Slide - Double Escape
	- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
	- 52-10-11, P. Block 501	Passenger/Crew Doors - FWD, AFT
	- 52-10-12, P. Block 501	Suspension - Door, FWD, AFT
	- 52-10-13, P. Block 401	Linning and Insulation - Door, FWD, AFT
	- 52-10-14, P. Block 501	Cylinder - Door Damper and Emergency Operation FWD, AFT
	- 52-10-20, P. Block 501	Mechanism - Door Locking, FWD, AFT
	- 52-10-30, P. Block 501	Mechanism - Emergency Escape Slide Release, FWD, AFT

2. Procedure

A. Job Set-Up
(1)Position access platform
(2)Place emergency opening control handle in DISARMED position.
(3)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
WARNING : THE REQUIREMENTS OF THE REFERENCED PROCEDURE MUST BE SATISFIED BEFORE STARTING MAINTENANCE OPERATIONS.
(4)Remove escape slide container (Ref. 25-61-11, P. Block 401)
(5)Remove door lining (Ref. 52-10-13, P. Block 401).
(6)Install ballast weight 98A52108008001.
R (7)Install passenger/crew doors sling 98A52008509000 on hoisting lugs.
(8)Apply a slight tension on the slings in order to take the weight of the door. If necessary, adjust the cable tension regulator.

B. Removal (Ref. Fig. 401, 402)
(Ref. Fig. ,)

(1) On door, at longeron 4, remove electrical connector from terminal strip. Remove the cable sheath attachment clamp.
(2) On door side, disconnect upper guide arm. Remove cotter pin (4), loosen castellated nut (3) ; remove washer (2) ; drive out bolt (1) ; remove upper guide arm.

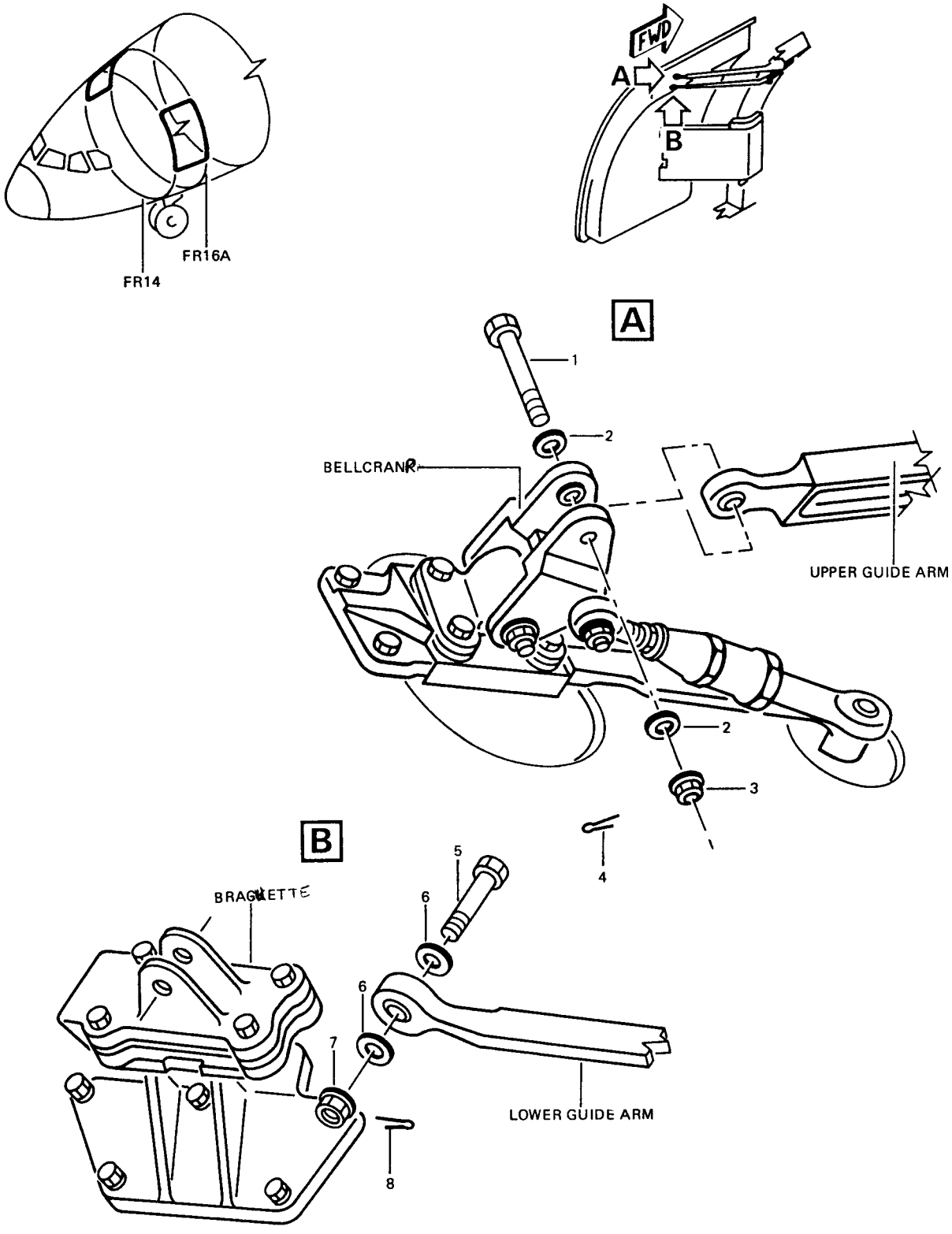
NOTE : When the door is free from the structure hold the guide arms until they reach the vertical position in order to avoid damage to a bolt or a structure component.

(3) On door side, disconnect lower guide arm. Remove cotter pin (8) ; loosen castellated nut (7) ; remove washer (6). Drive out bolt (5). Remove lower guide arm.
(4) On support arm side ; remove both screws (13) remove washers (14) and allow bonding strips (15) to hang against the door.
(5) Install nut (29) holding rod spring (nut 1/4, 28 threads per inch) on door side remove cotter pin (20), loosen castellated nut (21), remove washer (22) ; remove spring rod and washer (24).
(6) Remove telescopic rod : on door side : remove cotter pin (28), loosen castellated nut (27), remove washer (26).
Drive out bolt (23) and lockplate (25). Push telescopic rod against the support arm in order to free telescopic rod fork end from bearing block integral with bracket.
(7) Remove cotter pins (12, 16). Loosen castellated nuts (11 and 17), remove washers (10 and 18). Make certain that bolts (9 and 19) can be removed easily, tighten or slacken sling.
Drive out bolts (9 and 19). Remove chromium plated washers located in internal faces of connection link fork ends.
(8) Remove the door and place it on an appropriate support.
NOTE : Guide the door to avoid damage of door or aircraft fuselage.

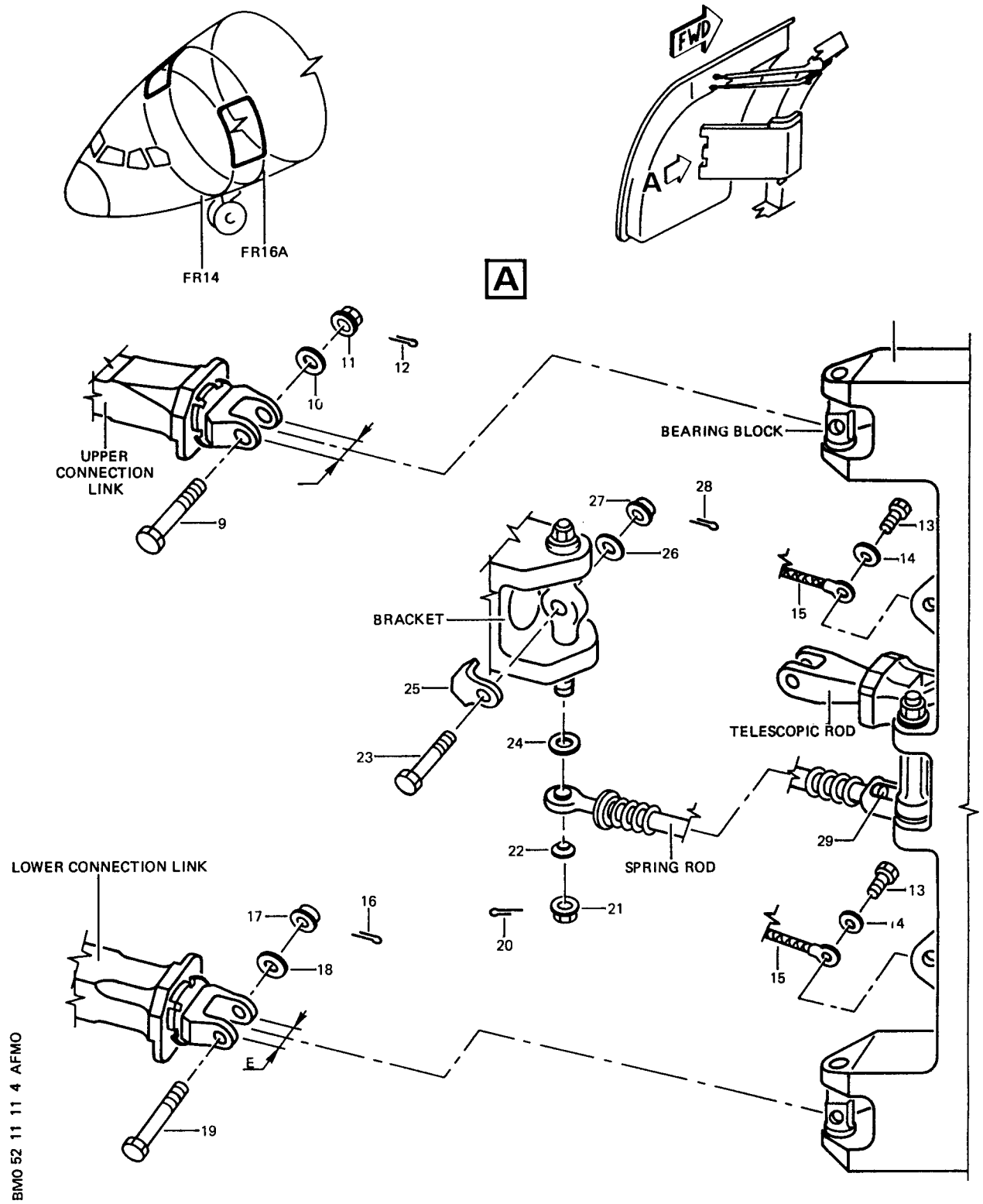
C. Preparation of Replacement Component

(1) Check the new door for correct condition, check that it is free from cracks or scratches.
Check door seal and mechanism for correct condition. Check for traces of corrosion.
(2) Clean and slightly lubricate the guide arm and support arm attachment bolts (material No. 04-004).
(3) On support arm, clean contact surfaces of bonding strips.
(4) If necessary, place interior control handle in open position.
(5) Make certain that emergency opening control handle is in DISARMED position.
(6) Install ballast weight.
(7) Install slings on the new door.

D. Installation (Ref. Fig. 401, 402, 403)
(Ref. Fig. ,)



Linkage of Upper and Lower Guide Arms
Figure 401



Support Arm Linkage on Door
Figure 402

(1)measure thickness of support arm bearing blocks and dimension E on upper and lower connection links.
Select two chromium plated washers per hinge the thickness of which permits lateral play of 0 to 0.1 mm (0 to 0.004 in.) between the support arm and corresponding fork end.

R (2)Use sling 98A52008509000 and ballast weight 98A52108008001 to position door facing its frame.
NOTE : Guide the door so as to avoid damaging the door or the aircraft fuselage.

(3)Check alignment of door stop fitting with fuselage fittings.

(4)Install support arm bearing block in upper and lower connection link fork end.
Install chromium plated washers, install bolts (9) and (19) ; install washers (10), (18), tighten nuts (11), (17). Install cotter pins.

(5)Install lower guide arm. Install bolt (5) equipped with washer (6) in bracket and lower guide arm eye end. Install washer (6), tighten castellated nut (7) by hand.

(6)Install upper guide arm. Engage bolt (1) equipped with washer (2) in bellcrank and guide arm eye end. Install washer (2) ; hand tighten castellated nut (3).

(7)Install telescopic rod. Engage bolt (23) equipped with lockplate (25), install washer (26), tighten castellated nut (27). Install cotter pin.

(8)Install spring rod : engage washer (24) spring rod eye end, washer (22), tighten castellated nut (21). Install cotter pin. Remove nut (29).

E. Adjustments

(1)Adjust suspension arms (Ref. 52-10-12, P. Block 501). Remove passenger door slings, reverse the two eye bolts and tighten them in their fittings.

(2)Adjust guide arms (Ref. 52-10-12, P. Block 501).

(3)Adjust door stop fittings (Ref. 52-10-11, P. Block 501).

(4)Adjust door locking mechanism (Ref. 52-10-20, P. Block 501).

(5)Adjust door latches (Ref. 52-10-11, P. Block 501).

(6)Adjust door compensation mechanism (Ref. 52-10-11, P. Block 501).

(7)Adjust door buffer (Ref. 52-10-11, P. Block 501).

(8)Adjust door damper and emergency operation cylinder (Ref. 52-10-14, P. Block 501).

(9)Adjust door emergency release mechanism (Ref. 52-10-14, P. Block 501).

(10)Adjust the emergency escape slide release mechanism (Ref. 52-10-30, P. Block 501).

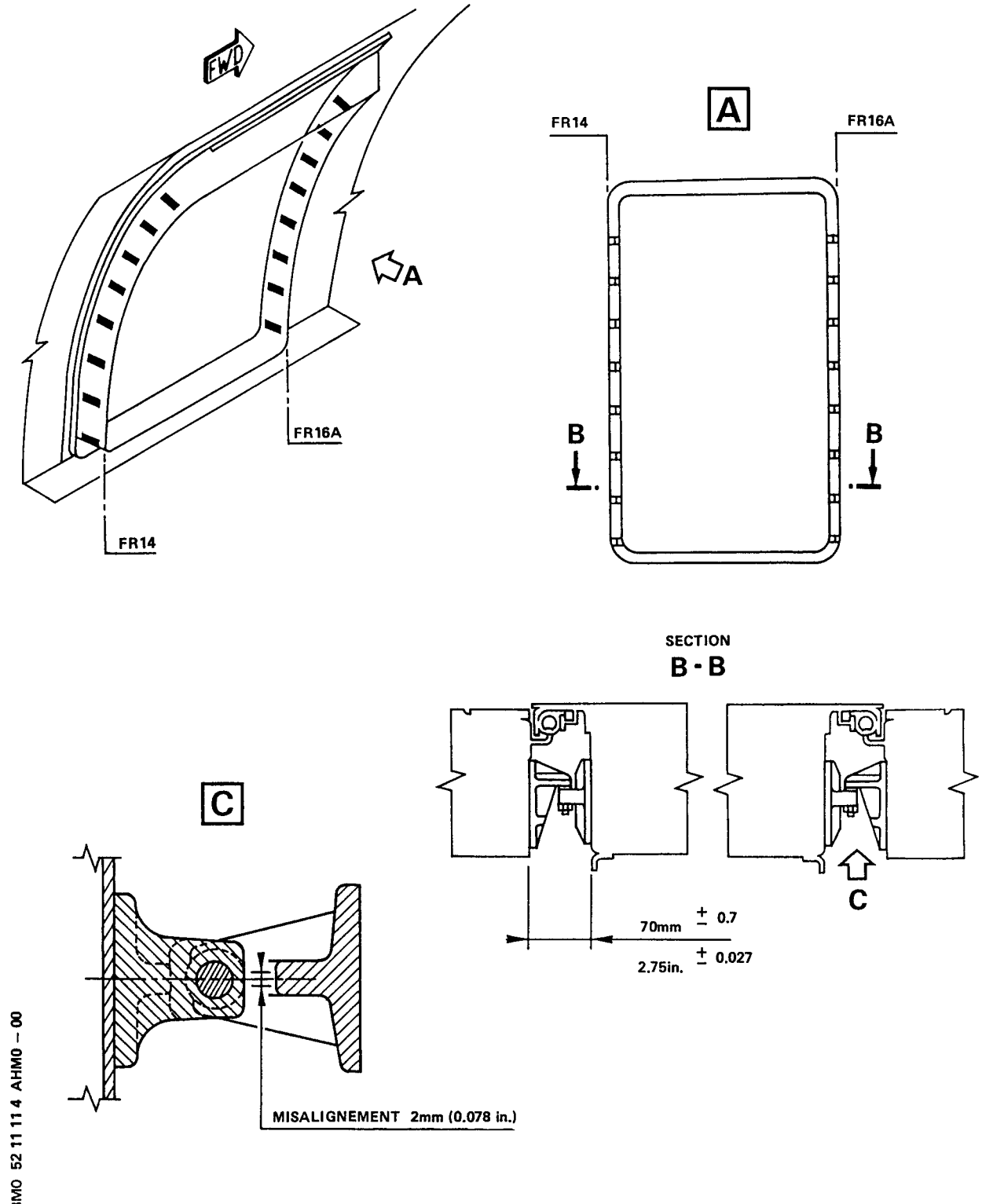
(11)Adjust girt bar fittings (Ref. 52-10-11, P. Block 501).

F. Close-Up

(1)Tighten castellated nuts (7), (3), securing lower guide arms. Install cotter pins.

(2)Install bonding strip on support arm. Insert washers and bonding strips (15) eye ends in both screws (13). Apply a coat of lacquer (Material No. 07-001).

(3)Install teminal strip at door lingeron 4. Install cable sheath clamp.



Alignment of Stop Fitting
Figure 403

(4)Make certain that the inside of the door is clean and clear of tools and miscellaneous items of equipment.
(5)Remove hoisting lugs (2) and degrease with cleaning agent (Material No. 11-004).
(6)Apply corrosion preventive paste (Material No. 05-002) to hoisting lugs and reinstall in door, flush with skin.
(7)Install self adhesive disc (3) (Material No. 05-052) over hoisting points.
(8)Remove ballast weight.
(9)Install door lining (Ref. 52-10-13, P. Block 401).
(10)Install escape slide container (Ref. 25-61-11, P. Block 401).
(11)Arm emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).

CAUTION : REQUIREMENTS OF THE REFERENCED PROCEDURE MUST BE SATISFIED AFTER COMPLETION OF MAINTENANCE OPERATIONS.

(12)Remove access platform.

WARNING : INSTALL ESCAPE SLIDE SAFETY PIN AND DISARM DOOR DAMPER AND EMERGENCY OPERATION CYLINDER PERCUSSION MECHANISM TO PREVENT INADVERTENT OPERATION DURING THE REMOVAL/INSTALLATION OF DOOR.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR FORWARD PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

1. Reason for the Job

A. Removal/Installation of the Following Items
(1)Support arm
(2)Door buffer
(3)Door stay mechanism
(4)Upper and lower guide arms
(5)Guide arm attach fittings

2. Equipment and Materials

ITEM	DESIGNATION
A. 98A52108003001	Pin, Safety Escape Slide
B. Material No. 04-004	Common Grease (Ref. 20-31-00)
C. Material No. 07-001	Lacquers (Ref. 20-31-00)
D.	Access Platform 4.5 m (15 ft.)
Referenced Procedures	
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT, Aft Passenger/Crew Doors
- 52-10-12, P. Block 501	Door Suspension
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-14, P. Block 401	FWD, AFT Door Damper and Emergency Operation Cylinder
- 52-11-11, P. Block 401	FWD Passenger/Crew Door/Removal/Installation

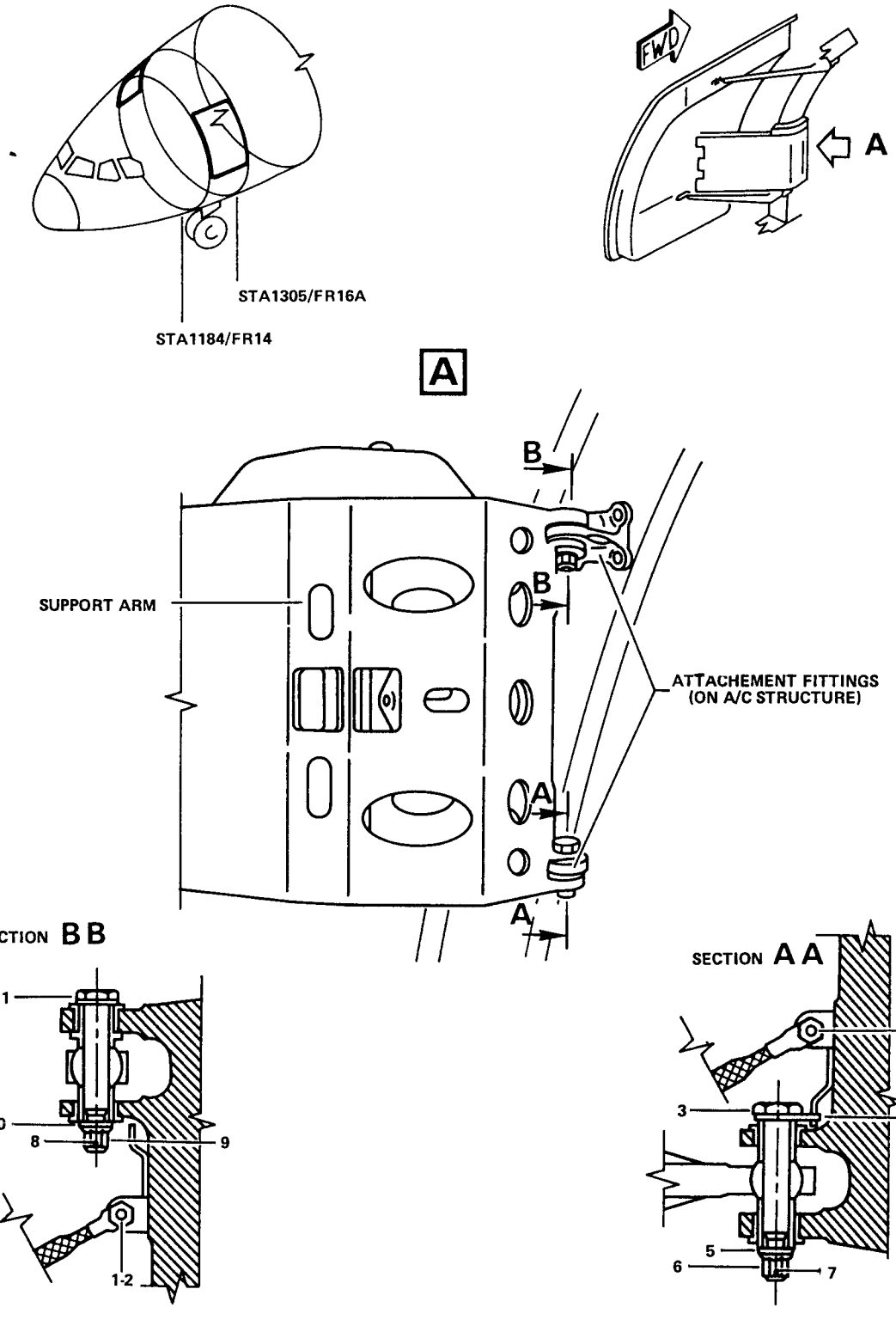
3. Procedure

A. Job Set-Up

(1)Position access platform.
(2)Place emergency opening control handle in DISARMED position.
(3)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
WARNING : THE REQUIREMENTS OF THE REFERENCED PROCEDURE MUST BE SATISFIED BEFORE STARTING MAINTENANCE OPERATIONS.
(4)Remove lining as required (Ref. 52-10-13, P. Block 401)

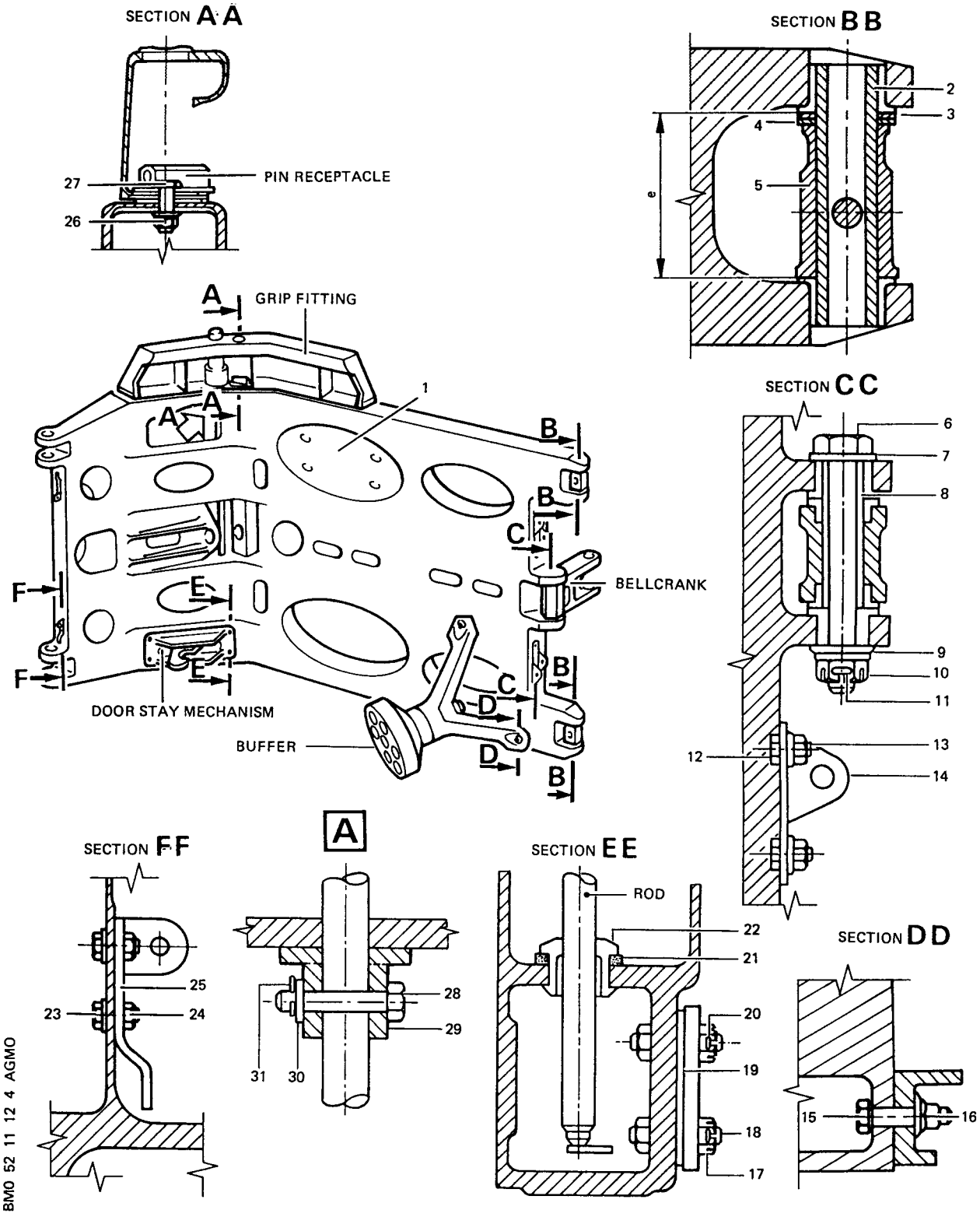
B. Removal

(1)Support arm (Ref. Fig. 401,)

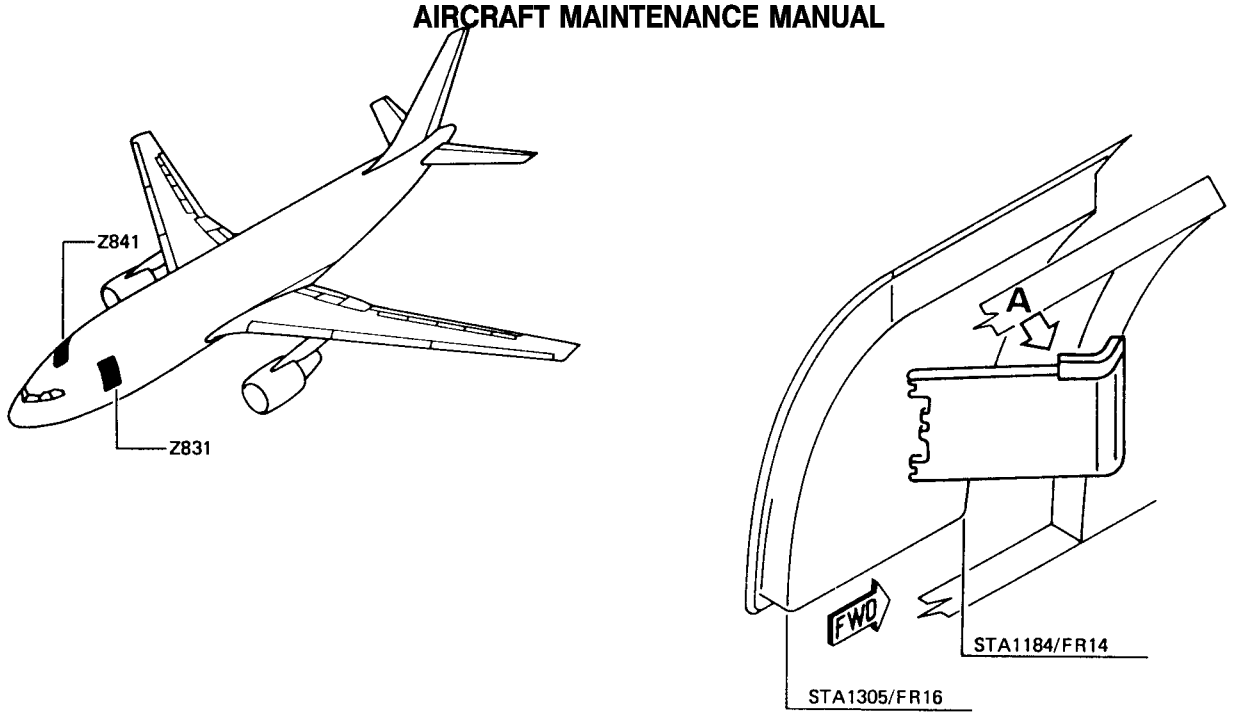


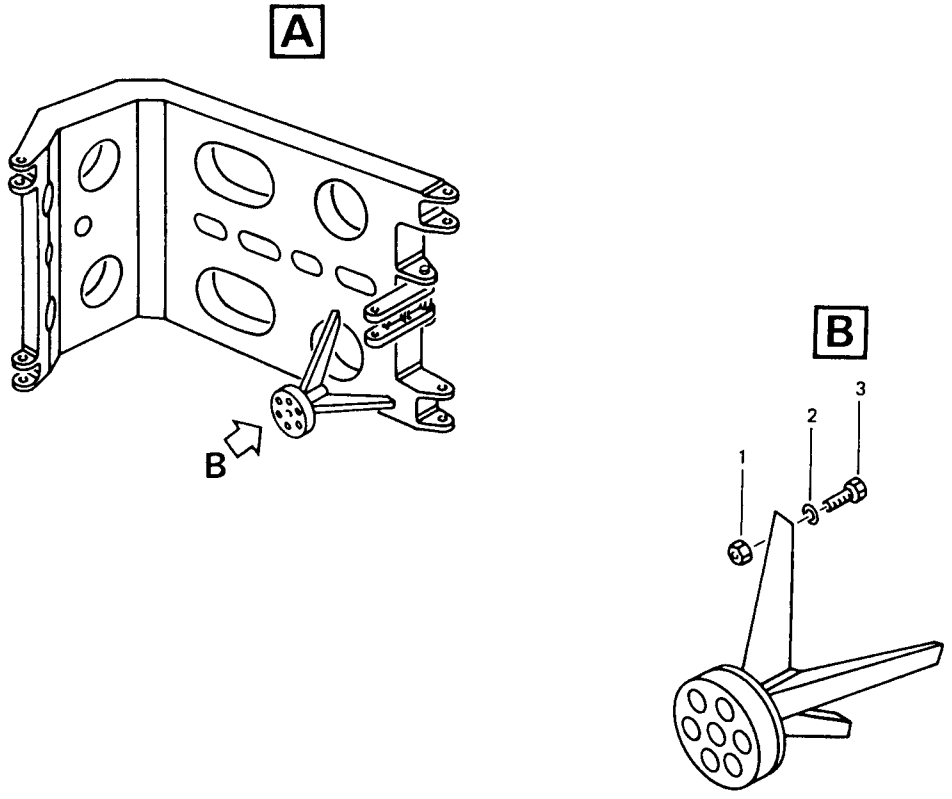
Disassembly of Support Arm/Structure Attachments
Figure 401

(a)Remove door damper and emergency operation cylinder (Ref. 52-10-14, P. Block 401).
(b)Remove electrical connector pins from terminal block (door side).
NOTE : Do not remove telescopic rod and spring rod from the door.
(c)Remove door (Ref. 52-11-11, P. Block 401).
(d)Remove electrical wires from their conduits.
(e)On support arm side, remove both bolts (1) and both nuts (2). Do not detach bonding jumpers from aircraft structure.
(f)Remove cotter pins (7) and (8). Loosen castellated nuts (6) and (9), remove washers (5) (10).
Hold support arm and drive out pin (11) and pin (3) equipped with lock plate (4).
(g)Install support arm on an appropriate support.
(h)Disassembly of Support Arm (Ref. Fig. 402)
1 Remove clamp attaching electrical wire conduit inside support arm. Remove conduit.
2 Remove door (1) ; remove the four securing screws.
3 Remove the two bonding tabs (14), nuts (13) and screws (12).
4 Remove the two bonding tabs (25) ; remove nuts (24), screws (23).
5 Disassemble bellcrank. Remove cotter pin (11), nut (10).
Remove pin (6) and washers (7 and 9).
Remove spacer (8).
6 Extract the two spacers (2). Remove bearing blocks (5). Retain the two adjustment washers (4) and chromium plated washers (3).
7 Remove the grip fitting. Remove the four nuts (26), the four bolts (27), cotter pin (31), pin (28) and retain washer (30). Pull grip fitting until rod is disengaged from support arm. Retain shouldered bush (29).
8 Disassemble door stay mechanism. Remove the four cotter pins (20), the four nuts (17). Remove the door stay mechanism. Retain both lockplates (19). Remove the four studs (18).
9 Remove buffer. Remove the three nuts (16). Remove buffer ; retain the three bolts (15).
10 Remove guide rod (22) and washer (21).
(2)Door buffer (Ref. Fig. 403,)
(a)Remove nuts (1), remove buffer; retain bolts (3) and washers (2).
(3)Door stay mechanism (Ref. Fig. 404,)
(a)Remove grip fitting
Remove the four nuts (1) and bolts (2).
Remove cotter pin (3), pin (4) and retain washer (5).
Pull grip fitting until rod is disengaged from support arm. Retain shouldered bush (6).
(b)Disassemble door stay mechanism
Remove the four cotter pins (7). Remove the four nuts (8). Retain washers (9). Remove door stay mechanism. Retain both lockplates (11).
Remove the four studs (10). Remove guide rod (12) and washer (13).
(4)Upper and lower guide arms. (Ref. Fig. 405, 406)
(Ref. Fig. ,).
(a)Remove cotter pin (7), nut (6), washer (5).
(b)Remove nut (9) and bolt (10).
(c)Hold upper guide arm. Drive out pin (8), bolt (1). Retain washer (2).



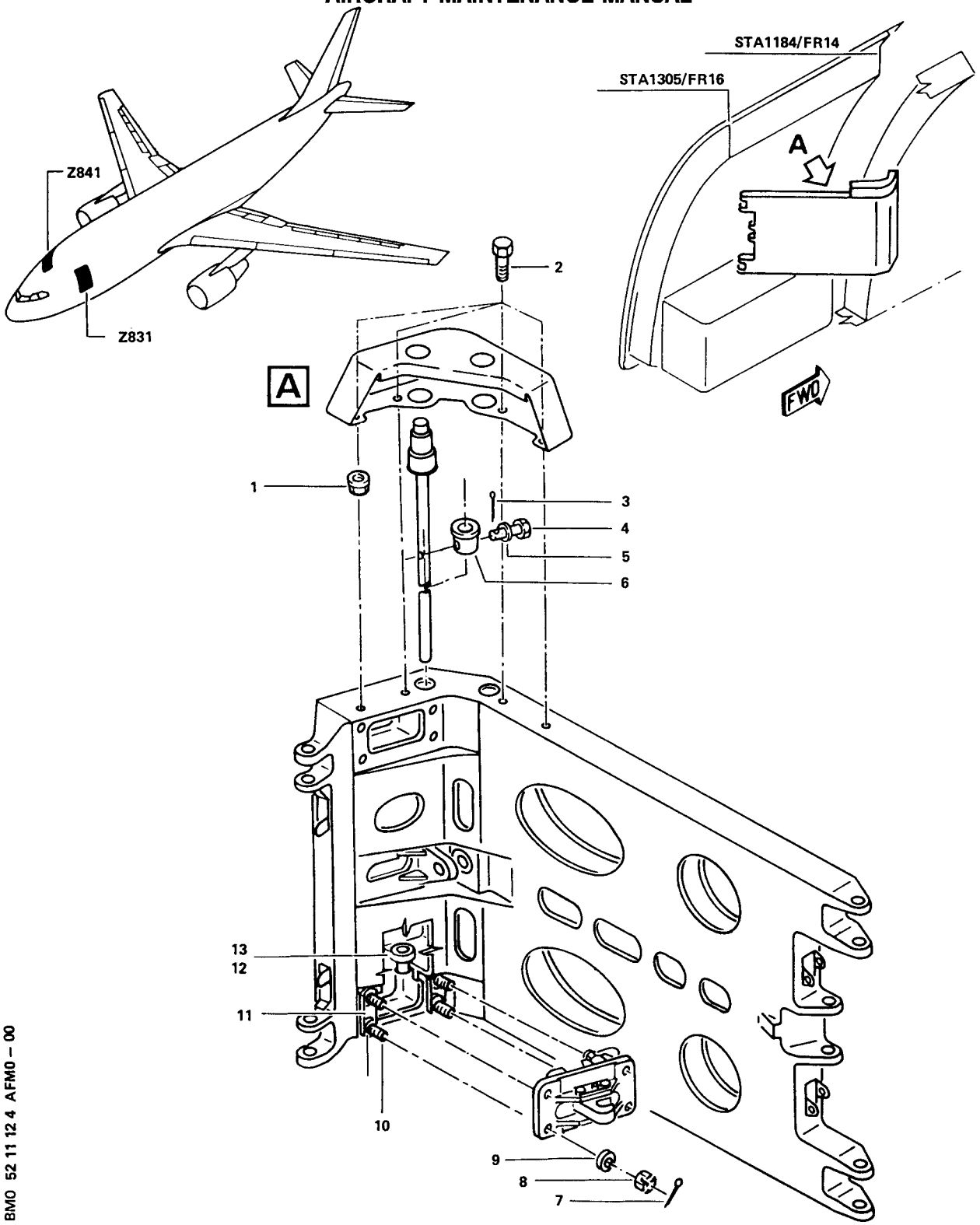
Disassembly/Assembly of Support Arm Components
Figure 402





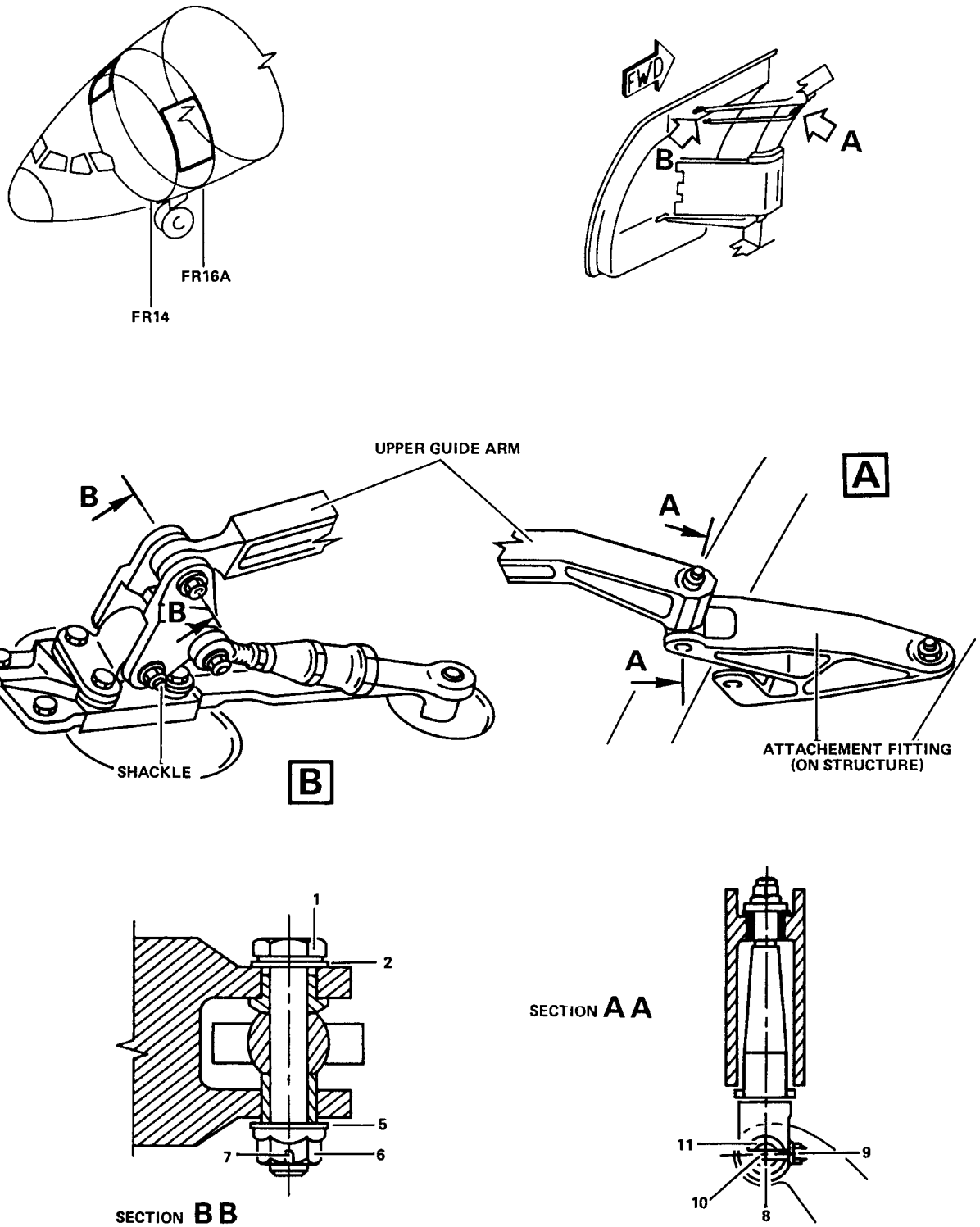
BMO 52 11 12 4 AJM0 – 00

Door Buffer
Figure 403



BMO 52 11 12 4 AFM0 – 00

Door Stay Mechanism
Figure 404



BMO 52 11 12 4 ABMO – 15

Disassembly of Upper Guide Arm Attachments
Figure 405

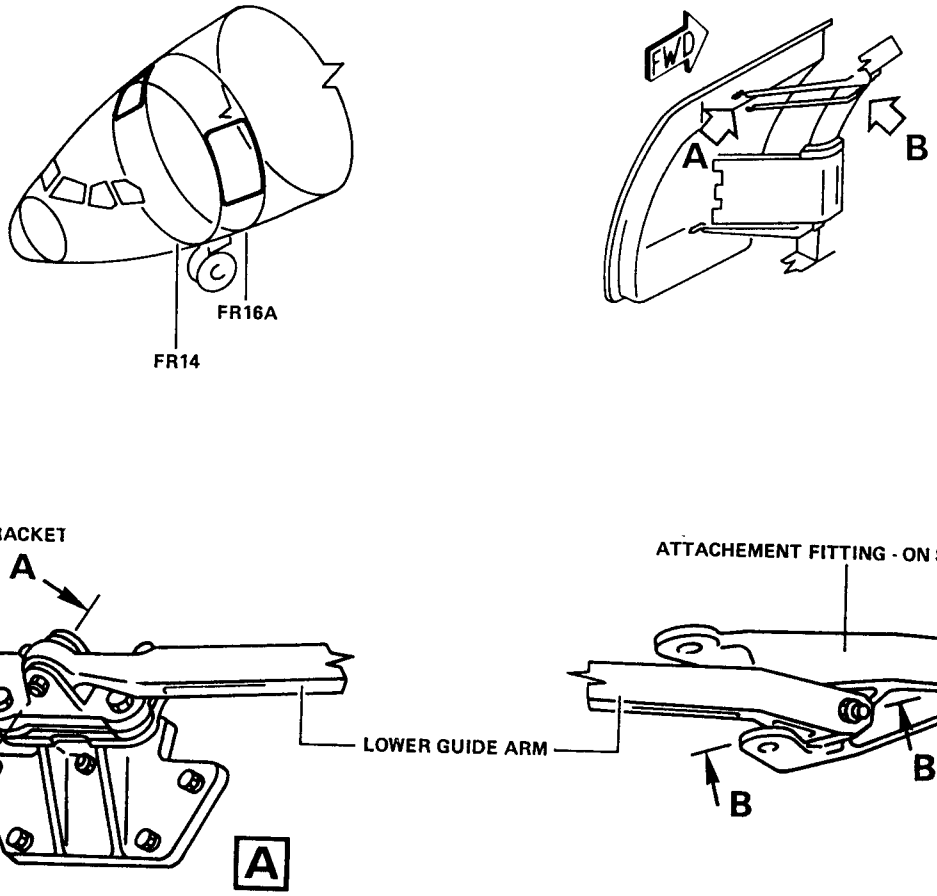
(d)Remove upper guide arm. Retain washers (11).
1 Remove cotter pin (7), nut (6), washer (5).
2 Remove nut (9) and bolt (10).
3 Hold lower guide arm, drive out pin (8), bolt (1). Retain washer (2).
4 Remove lower guide arm. Retain washers (11).

(5)Guide arm attach fittings
(a)Removal of upper guide arm attach fitting (Ref. Fig. 407,)
1 Remove upper guide arm (Ref. Para. 3.B.(4)(a)).
2 Remove spring rod (6). Remove cotter pin and nut (11) ; retain washer (12) ; drive out bolt (13). Remove cotter pin and nut (7) ; remove bolt (10), retain washers (8) and (9). Remove spring rod (6).
3 Remove shackle (21) : remove cotter pin and nut (17). Drive out bolt (14) ; retain washers (15) and (16).
4 Remove the four nuts (18), retain washers (19) ; drive out bolts (20); remove base plate (2) and retain shim (3).
5 Remove attach fitting (1) : remove bolts (22) and (5) ; identify bolt length for re-installation, retain washers (4) and remove attach fitting (1).

(b)Removal of lower guide arm attach fitting (Ref. Fig. 408,)
1 Remove lower guide arm (Ref. Para.3.B.(4)(b)).
2 Remove nut (7).
3 Remove nuts (10) and bolts (8). Retain washers (9).
4 Remove bolt (1); retain washer (2), remove attach fitting (6) retain shims (4) and (5).
5 Remove nuts (12), remove attach fitting (3). Retain shim (14), bolts (11) and washers (13).

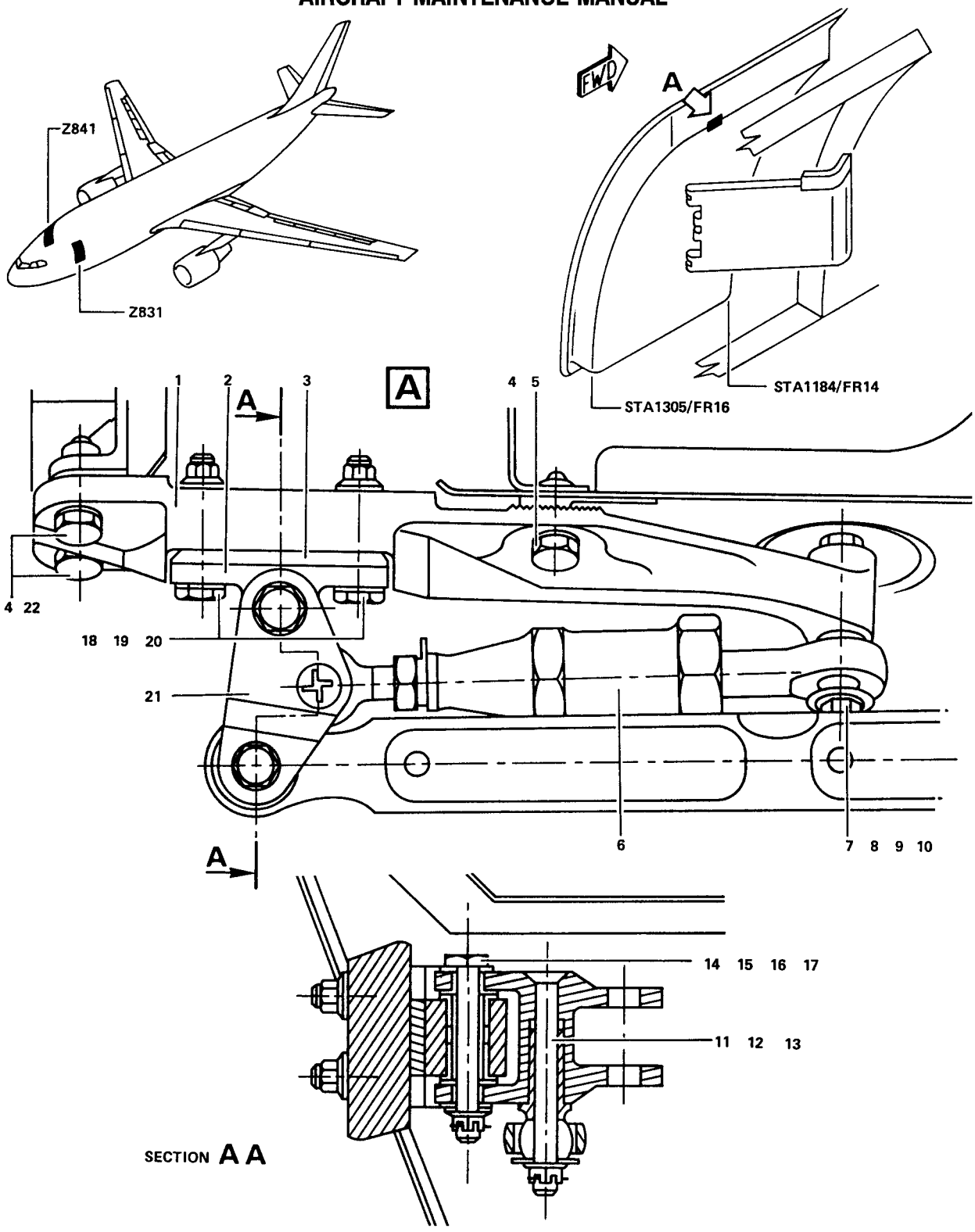
C. Preparation of Replacement Component

(1)Support arm (Ref. Fig. 402)
(a)Make certain that replacement support arm is not corroded and does not bear any cracks or scratches.
(b)Install buffer. Install the three bolts (15), tighten the three nuts (16).
(c)Install washer (21) and guide rod (22). Install the four studs (18) ; interpose two lock plates (19) ; install door stay mechanism. Tighten the four nuts (17). TORQUE to between 0.3 and 0.35 m.daN (26.5 lbf.in. and 31 lbf.in.). Install cotter pin (20).
(d)Install grip fitting. Engage rod. Install shouldered bush (29), and push rod until grip fitting is installed. Install bolts (27), tighten nuts (26). Install pin (28), washer (30) and cotter pin (31).
(e)On support arm, measure dimension "e". Select the two washers (4) so that clearance is included between 0 and 1 mm (0 to 0.039 in.). Install washers (3 and 4), bearing blocks (5), insert spacers (2). Make certain that holes in bearing blocks and spacer coincide and that both are perpendicular to support arm.
(f)Install bellcrank (make certain bellcrank is correctly orientated). Insert spacer (8).
Install bolt (6) and washer (7).
Install washer (9) ; tighten nut (10). Install cotter pin.
(g)Install bonding tabs (14 and 25). Engage bolts (12 and 23). Tighten

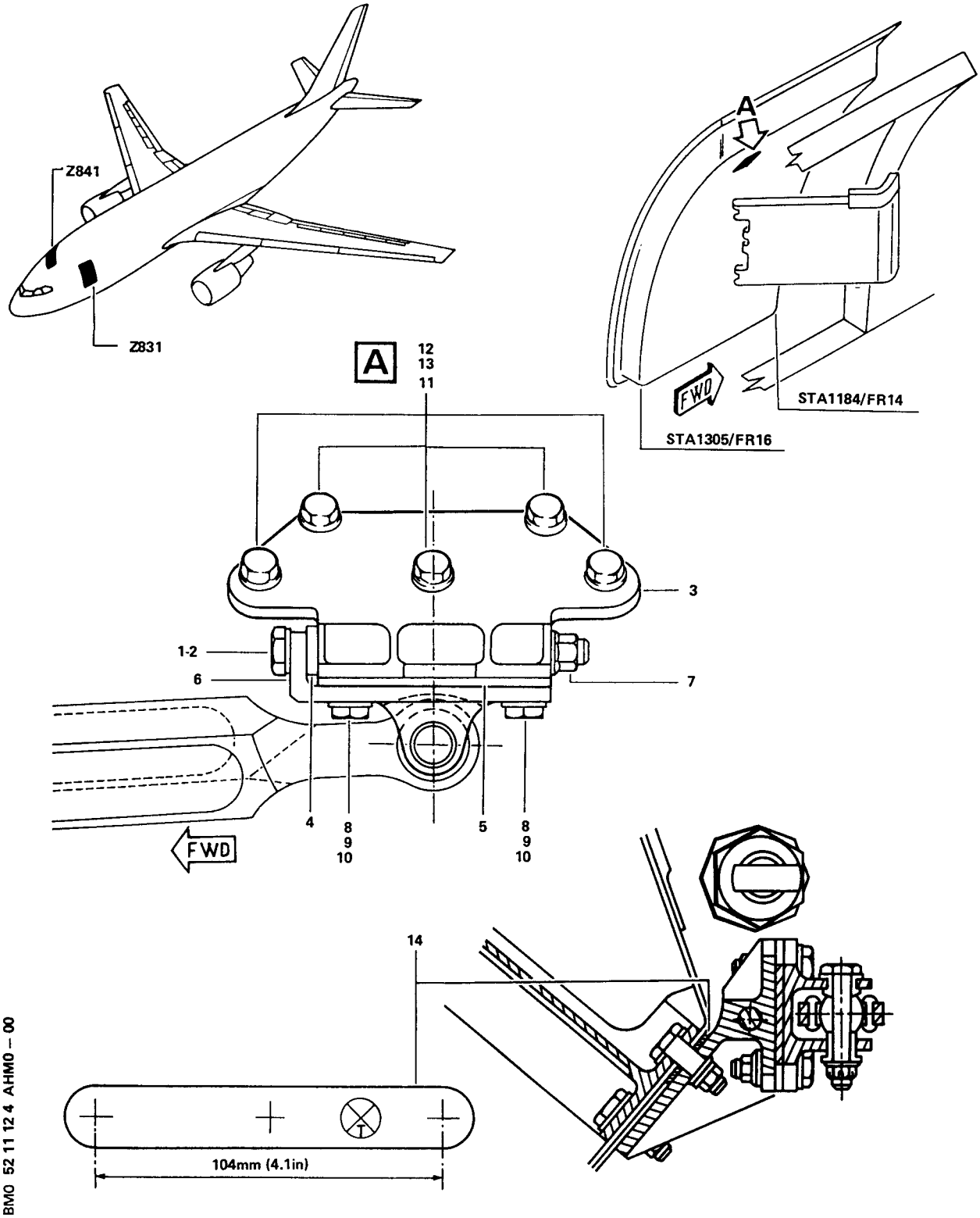


BMO 52 11 12 4 ADMO – 12

Disassembly of Lower Guide Arm Attachments
Figure 406



Upper Guide Arm Attach Fitting
Figure 407



Lower Guide Arm Attach Fitting
Figure 408

nuts (13 and 24).
(h)Install door (1) ; tighten the four securing screws.
(j)Engage electrical wire conduit inside the support arm. Tighten attachment clamp.

D. Installation

(1)Support arm (Ref. Fig. 401,)
(a)Slightly grease bolts (11 and 3) using Mat. No. 04-004.
(b)Offer up support arm fork ends on attach fittings.
Engage bolts (11) and (3) equipped with lock plate (4). Position lockplate (4) ; engage cut-out on bonding strip. Install washers (5 and 10), tighten castellated nuts (6 and 9). Install cotter pins.
(c)Install bonding strips : engage bolts (1) ; tighten nuts (2). Apply a coat of lacquer (material No. 07-001).
(d)Slide electrical wires in their conduit. Insert electrical wire pins in terminal block (door side).
(e)Install and adjust door (Ref. 52-10-00, P. Block 501) ; do not perform adjustment specific to support arm (buffer, door damper and emergency operation cylinder) at this stage.
(f)Install and adjust door damper and emergency operation cylinder (Ref. 52-10-14, P. Block 401).
(g)Adjust door buffer (Ref. 52-10-11, P. Block 501).
(2)Door buffer (Ref. Fig. 403,)
(a)Install door buffer using bolts (3), washers (2) and nuts (1).
(b)Adjust door buffer (Ref. 52-10-00, P. Block 501).
(3)Door stay mechanism (Ref. Fig. 404,)
(a)Install guide rod (12) and washer (13). Install the four studs (10); interpose the two lockplates (11) ; install door stay mechanism. Tighten the four nuts (8). TORQUE to between 0.3 and 0.35 m.daN (26.5 lbf.in. and 31 lbf.in.). Install cotter pins.
(b)Install grip fitting. Engage rod. Install shouldered bush (6), push rod until grip fitting is installed. Install bolts (2), tighten nuts (1). Install pin (4), washer (5) and cotter pin (3).
(c)Fully open door and check locking mechanism.
(4)Upper and lower guide arms
(a)Upper guide arm (Ref. Fig. 405,)
1 Slightly grease bolt (1) and pin (8) (Material No. 04-004).
2 On structure side, install guide arm eye end in attach fitting fork end. Install washers (11) ; engage pin (8) ; so that bolt (10) hole is visible.
Engage bolt (10), install nut (9) tighten nut (9). TORQUE to between 0.35 and 0.45 m.daN (31 and 40 lbf.in.).
3 Install guide arm eye end in bellcrank fork end (door side). Make certain that bolt (1) can be engaged freely.
If bolt cannot be engaged freely, adjust upper guide arm (Ref. 52-10-12, P. Block 501).
4 Install bolt (1) equipped with washer (2). Install washer (5) ; tighten nut (6). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.
5 Operate the door several times ; check that guide arm eye ends

rotates correctly.

(b)Lower guide arm (Ref. Fig. 406,)

1 Slightly grease bolt (11) and pin (8). (Material 04-004).

2 On structure side, install guide arm eye end in attach fitting fork end.
Interpose washers (11), engage pin (8) so that hole provided for bolt (10) is visible.
Engage bolt (10) ; install nut (9). Tighten nut (9). TORQUE to between 0.35 and 0.45 m.daN (31 and 40 lbf.in.).

3 Install guide arm eye end in bracket fork end (door side) ; make certain that bolt (1) can be engaged freely. If bolt (1) cannot be engaged freely, adjust lower guide arm (Ref. 52-10-12, P. Block 501).

4 Install bolt (1) equipped with washer (2) ; install washer (5), tighten nut (6). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.

5 Operate the door several times ; check that guide arm eye ends rotate correctly.

(5)Guide arm attach fittings

(a)Upper guide arm attach fitting (Ref. Fig. 407,)

1 Install attach fitting (1) using bolts (22) and (5) and washers (4). Install bolts in correct position as per length identification made on removal.

2 Install shim (3), base plate (2) using bolts (20), and washers (19). Tighten nut (18). TORQUE to between 0.70 and 0.80 m.daN (62 and 71 lbf.in.).

3 Install shackle (21) using bolt (14), washers (15)(16) and nut (17). Tighten nut (17). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.

4 Install spring rod (6) ; install bolt (13), washer (12). Tighten nut (11). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.
Install bolt (10), washers (8)(9), nut (7). Tighten nut (7). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.

(b)Lower guide arm attach fitting (Ref. Fig. 408,)

1 Install shim (14) ; install attach fitting (3). Install bolts (11), washers under bolt head (13). Tighten nuts (12). TORQUE to between 0.70 and 0.80 m.daN (62 and 71 lbf.in.).

2 Install shim (5) and attach fitting (6) using bolts (8), washers under bolt head (9) and nuts (10). Do not tighten nuts.
Interpose shim (4), install bolt (1), washer (2), nut (7).
Tighten nut (7). TORQUE to between 0.80 and 1 m.daN (71 and 88.5 lbf.in.).
Tighten nuts (10). TORQUE to between 0.70 and 0.80 m.daN (62 and 71 lbf.in.).

(c)Install removed attach fitting guide arm (Ref. Para. 3.D.(4)(a) or 3.D.(4)(b)).

(d)Operate the door several times; check for proper operation.

E. Close-Up

(1)Install door lining (Ref. 52-10-13, P. Block 401).
(2)Arm emergency operation cylinder and door warning system (Ref. 52-10-14, P. Block 501).
(3)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(4)Remove access platform.

DOOR LOCKING MECHANISM - REMOVAL/INSTALLATION

WARNING : INSTALL ESCAPE SLIDE SAFETY PIN AND DISARM DOOR DAMPER AND EMERGENCY OPERATION CYLINDER PERCUSSION MECHANISM TO PREVENT INADVERTENT OPERATION DURING THE REMOVAL/INSTALLATION OF DOOR.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR FORWARD PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

1. Reason for the Job

A. Removal and Installation of the following :
- (1)Locking shaft
- (2)Door latches and lining hinge arms
- (3)Lowering shaft
- (4)Interior control handle
- (5)Interior control handle latch assembly
- (6)Exterior control handle
- (7)Gearbox and locking hook
- (8)Twin lever
- (9)Lifting shaft
- (10)Torsion bar spring and torque shaft
- (11)Upper connection link
- (12)Lower connection link

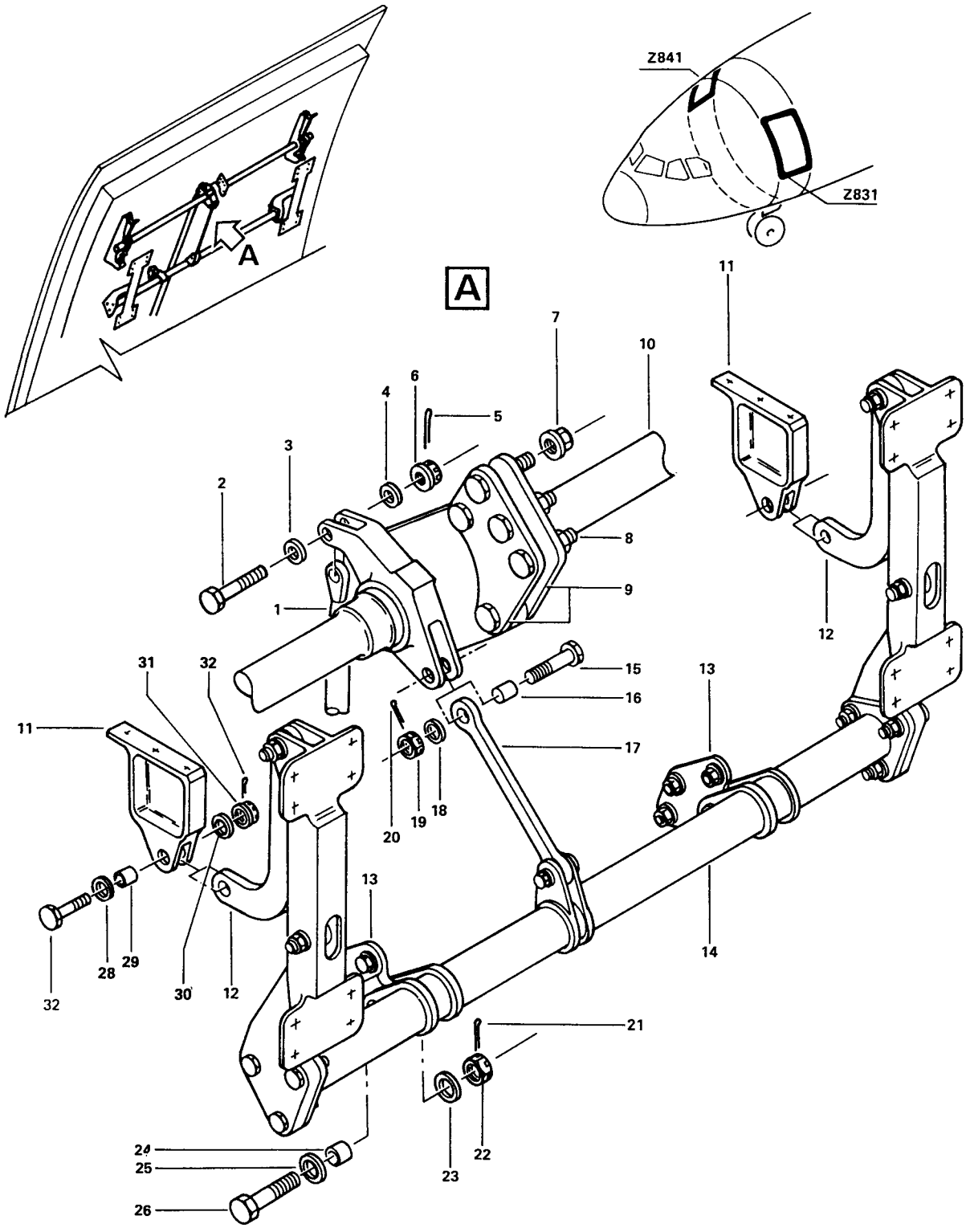
2. Equipment and Materials

	ITEM	DESIGNATION
	A. 98A52108003001	Pin - Safety, Escape Slide
	B. 98A52108008000	Ballast Weight Assy - Passenger/crew doors
R	C. 98A52008509000	Sling-Universal, Doors
	D.	Access Platform 4.5 m (15 ft.)
	E. Material No. 04-004	Common Greases (Ref. 20-31-00)
	F. Material No. 07-001	Lacquers (Ref. 20-31-00)
	G. Material No. 09-013	Sealants (Ref. 20-31-00)
	H. Material No. 16-002	Structure Paints (Ref. 20-31-00)
	J. Material No. 16-006	Structure Paints (Ref. 20-31-00)
	K.	Torque Wrench. Torque Value : 0 to 5 m.daN (0 to 440 lbf.in.)
	L.	Torque Wrench. Torque Value : 0 to 15 m.daN (0 to 110 lbf.ft.)
	M.	Corrosion resistant steel lockwire
	Referenced Procedures	
	- 25-61-11, P. Block 401	Double Escape Slide
	- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
	- 52-10-11, P. Block 501	FWD AFT Passenger/Crew Door
	- 52-10-12, P. Block 501	FWD, AFT Door Suspension
	- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
	- 52-10-20, P. Block 501	FWD, AFT Door Locking Mechanism
	- 52-11-11, P. Block 401	FWD Passenger/Crew Door

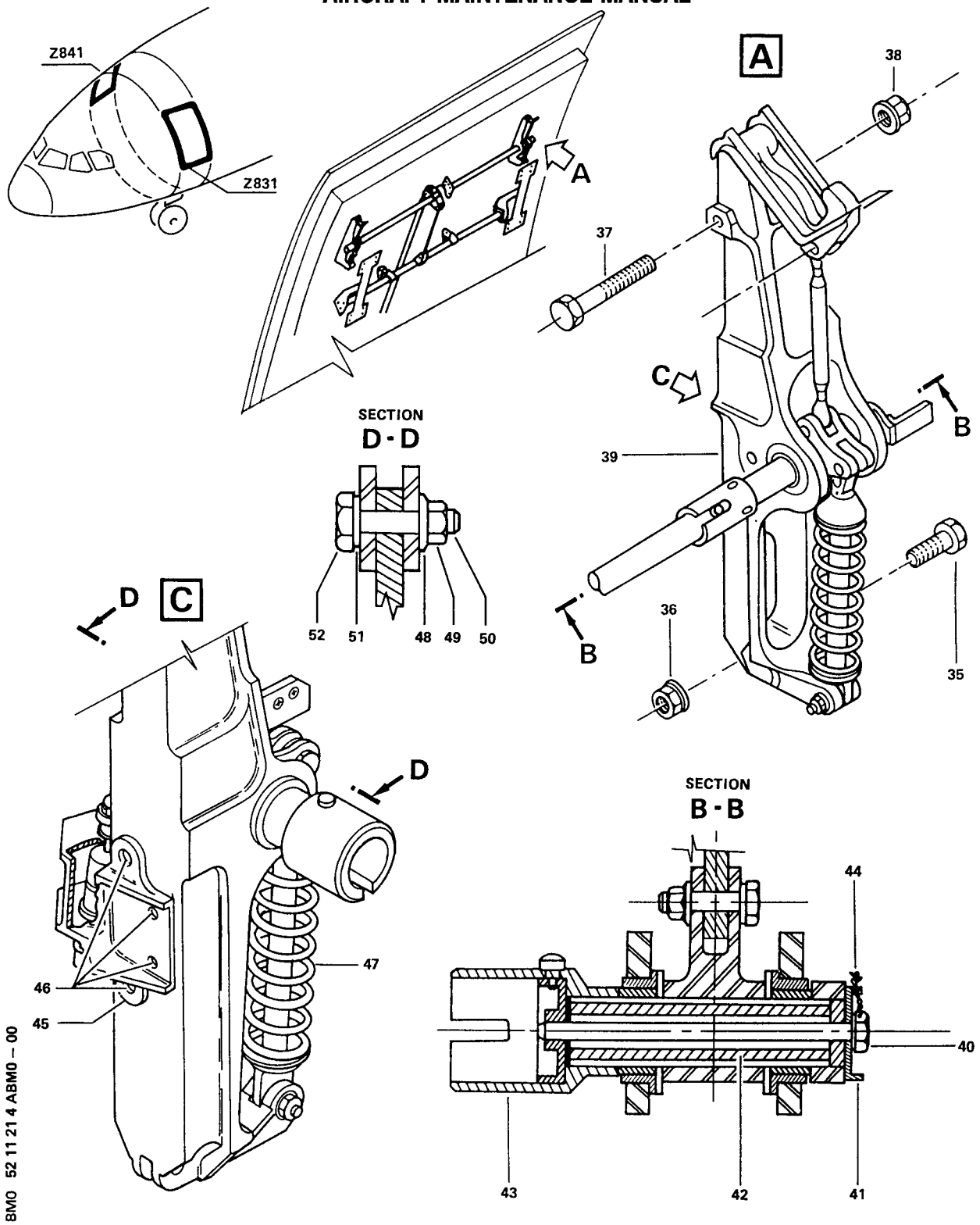
3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Place emergency opening control handle in DISARMED position.
(3)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
WARNING : THE REQUIREMENTS OF THE REFERENCED PROCEDURE MUST BE SATISFIED BEFORE STARTING MAINTENANCE OPERATIONS.
(4)If necessary, remove escape slide container (Ref. 25-61-11, P. Block 401).
(5)Remove door lining at level of sub-assembly to be removed (Ref. 52-10-13, P. Block 401).
(6)If necessary, install ballast weight to carry out adjustments.
(7)Unload the torsion bar:
NOTE: The following steps are necessary for removal/installation of the Exterior Control Handel, Gear Box and Looking Hook, Twing Lever, Lifting Shaft; Torsion Bar Spring and Torque Shaft, and Upper and lower Connection Links only.
R (a) Install sling PN 98A52008509000 to door crane and lift the door.
(b) Release the torsion bar spring by means of tension bolt (Ref. step B (10)(a).

B. Removal
(1)Locking shaft (Ref. Fig. 401,)
(a)Disconnect pushrod (1) : remove cotter pin (5), nut (6), retain washers (3) and (4), remove bolt (2).
(b)Remove movable flap control rod (17) : remove cotter pin (20), nut (19), bolt (15), retain spacer (16) and washer (18).
(c)Remove the six nuts (7), bolts (8), flange plates (9).
(d)On each latch support (Ref. Fig.) (Section B-B) : cut and remove lockwire (44), remove bolt (40), washer (41) and indicating plate. Screw a 7/16.20. UNF screw at each end of the splined shaft (42). By means of these screws, withdraw the two splined shafts (42) to free them from yokes (43). Remove locking shaft (10).
(e)Remove shaft (14) and movable flap supports :
- disconnect the two upper levers (12); remove cotter pins (32), nuts (31), bolts (27); retain washers (28) (30) and spacers (29).
- Remove yokes from shaft (14); remove cotter pins (21), nuts (22), bolts (26), retain washers (23) and (25) and spacers (24).
- Remove the locking shaft (14) and movable flap supports assembly.
(2)Door latches and lining hinge arms.
(Ref. Fig. 402,)
(a)On each latch support : cut and remove lockwire (44), remove bolt (40), washer (41) and indication plate. Screw a 7/16.20.UNF screw at each end of the splined shafts (42). By means of these screws, withdraw the two splined shafts (42) to free them from yokes (43).
(b)Disassemble the upper latch support assemblies (39) :
Remove nuts (36) (38), bolts (35) (37).
Disconnect the microswitch electrical connector.
Remove the upper latch support assemblies (39).



Locking Shaft
Figure 401



Door Latches and Lining Hinge Arms
Figure 402

(c)Removal of microswitch bracket (45) :
Discard rivets (46).

(3)Lowering shaft (Ref. Fig. 403,)
(a)Remove rod (18) : Remove cotter pins (16), nuts (15); retain washers (14). Remove bolts (10), and rod (18).
(b)Remove hook (22) : Remove cotter pin (19), nut (20); retain washer (21), remove bolt (23), and hook (22).
(c)Remove spring rod (11) : Withdraw circlips (2), retain washers (3), slightly compress spring rod (11) and remove pins (4). Remove spring rod.
(d)Remove lowering shaft (1). Remove cotter pin (6), nut (7); retain washer (8). Remove the four nuts (9), the four bolts (10), and plate (5). Disassemble shaft from aft plate (13); remove lowering shaft (1).
(e)Remove aft plate (13) : Remove the three nuts (12), the three bolts (17). Remove aft plate.
(f)Remove rollers (25). Remove cotter pin (30), nut (29), retain washer (28); remove bolt (27); retain washer (26), roller (25) and washer (24).

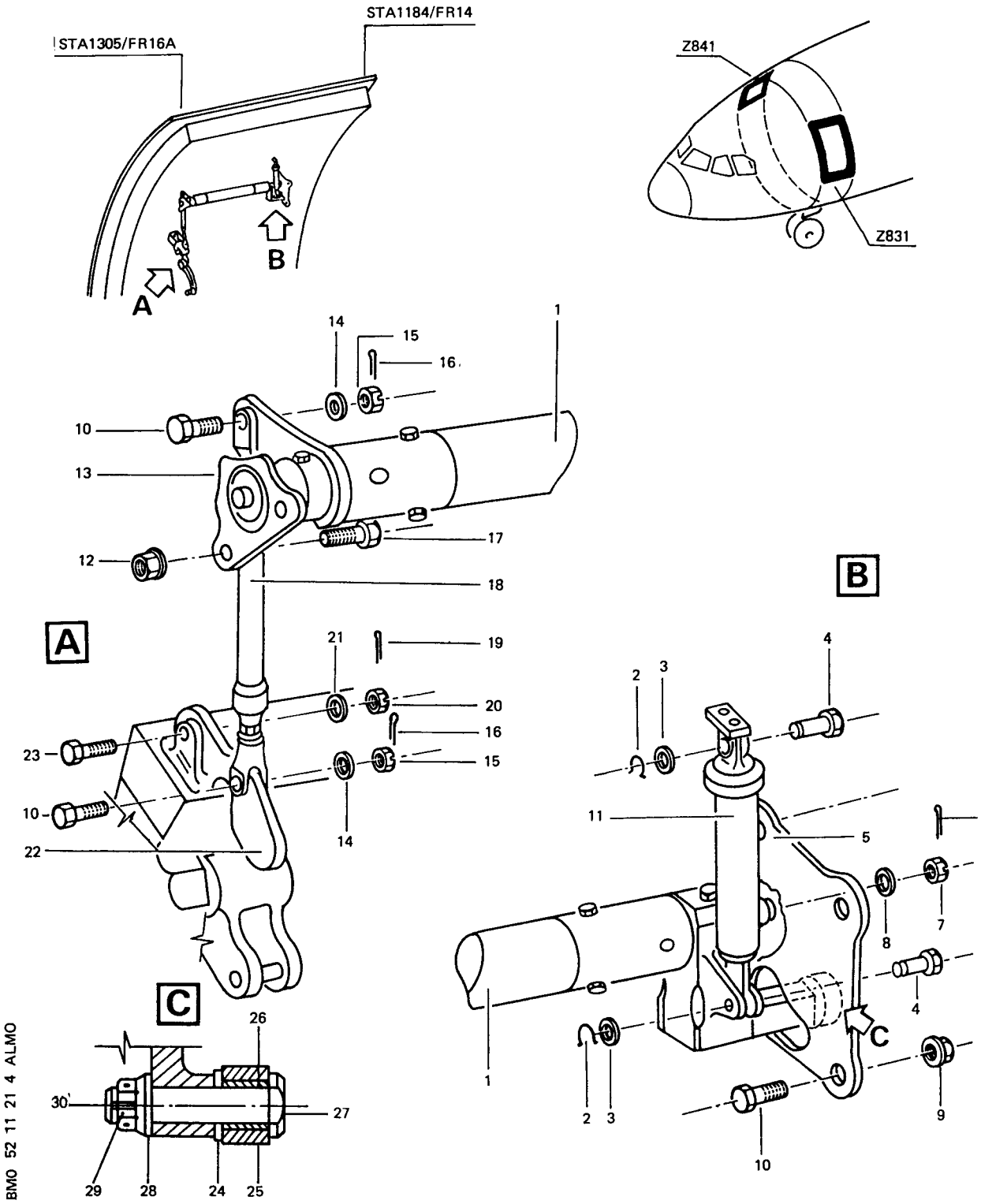
(4)Interior control handle
(Ref. Fig. 404,)
(a)Remove cotter pin (1), nut (2); retain washer (3).
(b)Remove interior control handle (10) from hinge pin.

(5)Interior control handle latch assy
(a)Remove interior control handle (Ref. paragraph 3.B (4)).
(b)Cut lockwire (4), remove nut (5), washer (6).
(c)Remove cotter pin (8), castellated nut (7), remove washer (9).
(d)Remove locking assembly (11).

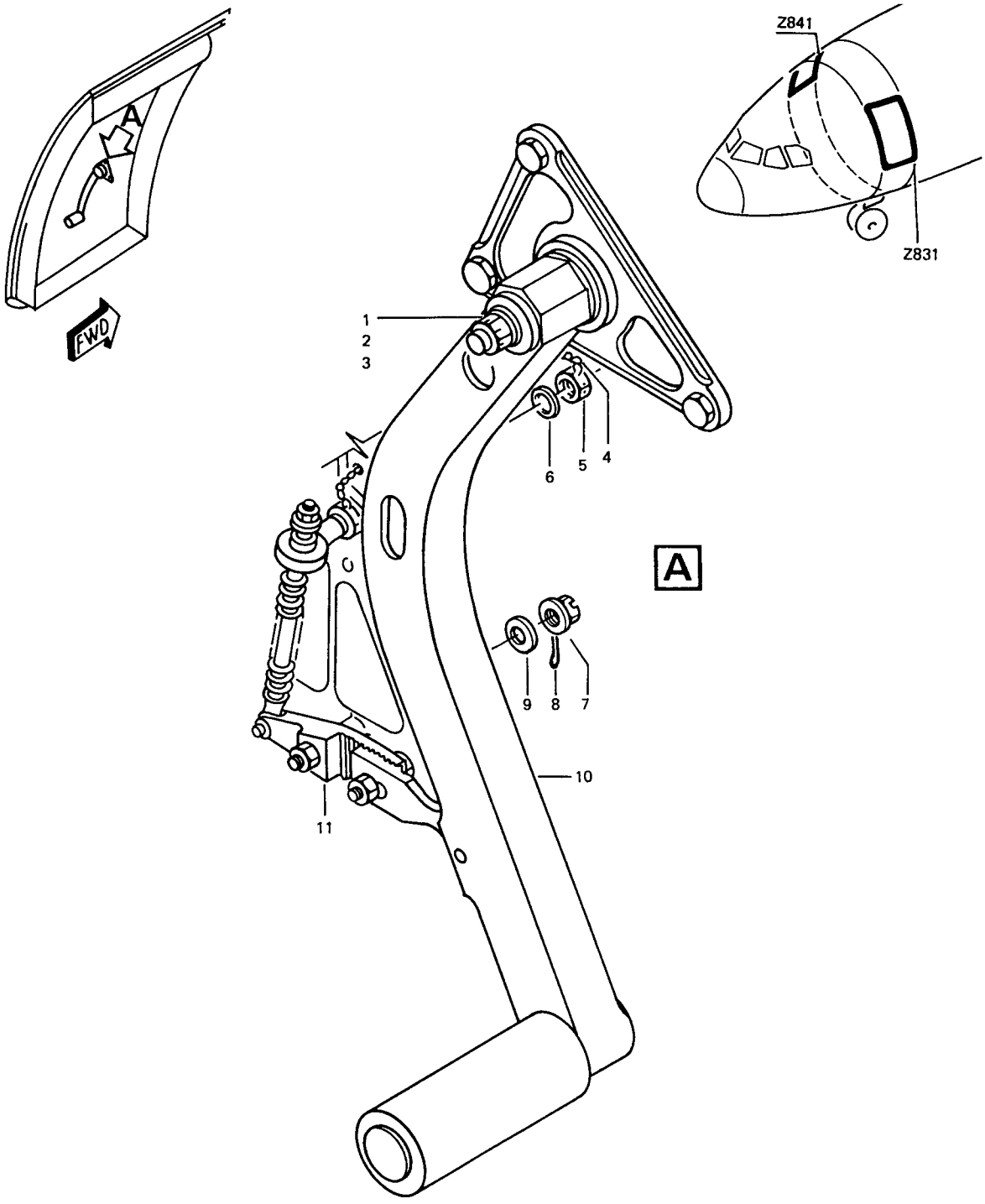
(6)Exterior control handle.
(Ref. Fig. 405,)
(a)Remove interior control handle (Ref. paragraph 3.B (4)).
(b)Remove support fitting (10) : remove the three nuts (11) and support fitting; retain washers (9) and bolts (8).
(c)Remove pushrod hinge pins (7).
(d)Remove access door to exterior control handle hinge pin, on the outside part of the door (two screws).
(e)Remove cotter pin (4), nut (5), and washer (3).
Note direction of identifier mark on pin (1) head with respect to gearbox.
(f)Remove pin (1) while holding exterior control handle (2). As soon as it is free from its pin, remove exterior control handle. Retain adjustment washer (6).

(7)Gearbox and locking hook
(Ref. Fig. 406,)
(a)Remove exterior and interior control handles (Ref. paragraph 3.B (4) and (6)).
(b)Remove cotter pin (6), nut (5), washer (4), bolt (2); remove hook (3) from box (1).
(c)Unscrew the four nuts (7), remove bolts (8).
(d)Remove box (1), O-ring (9).

(8)Twin lever (Ref. Fig. 407,)
(a)Disconnect pushrod (23). Remove cotter pin (21), nut (20), retain

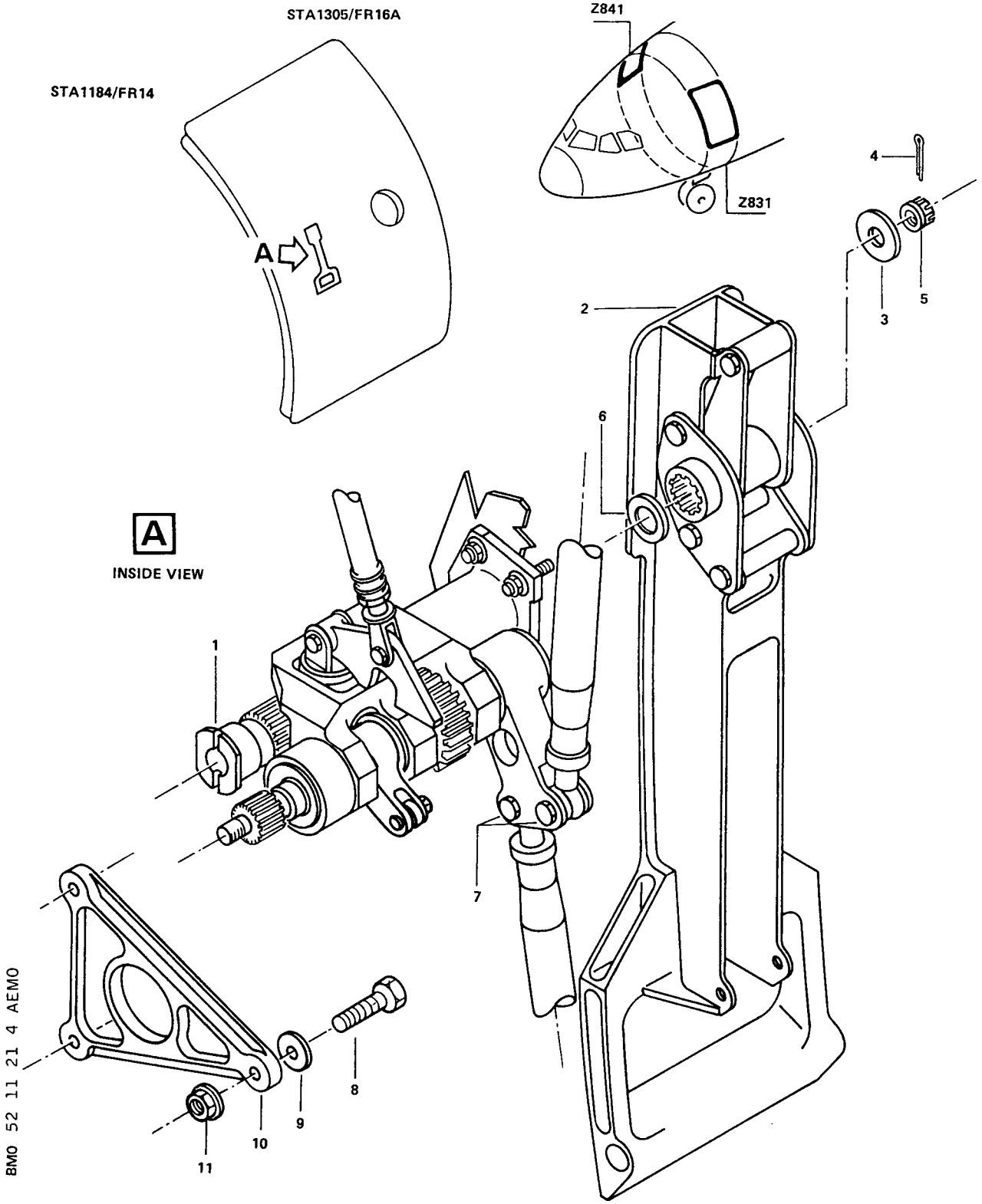


Lowering Shaft
Figure 403

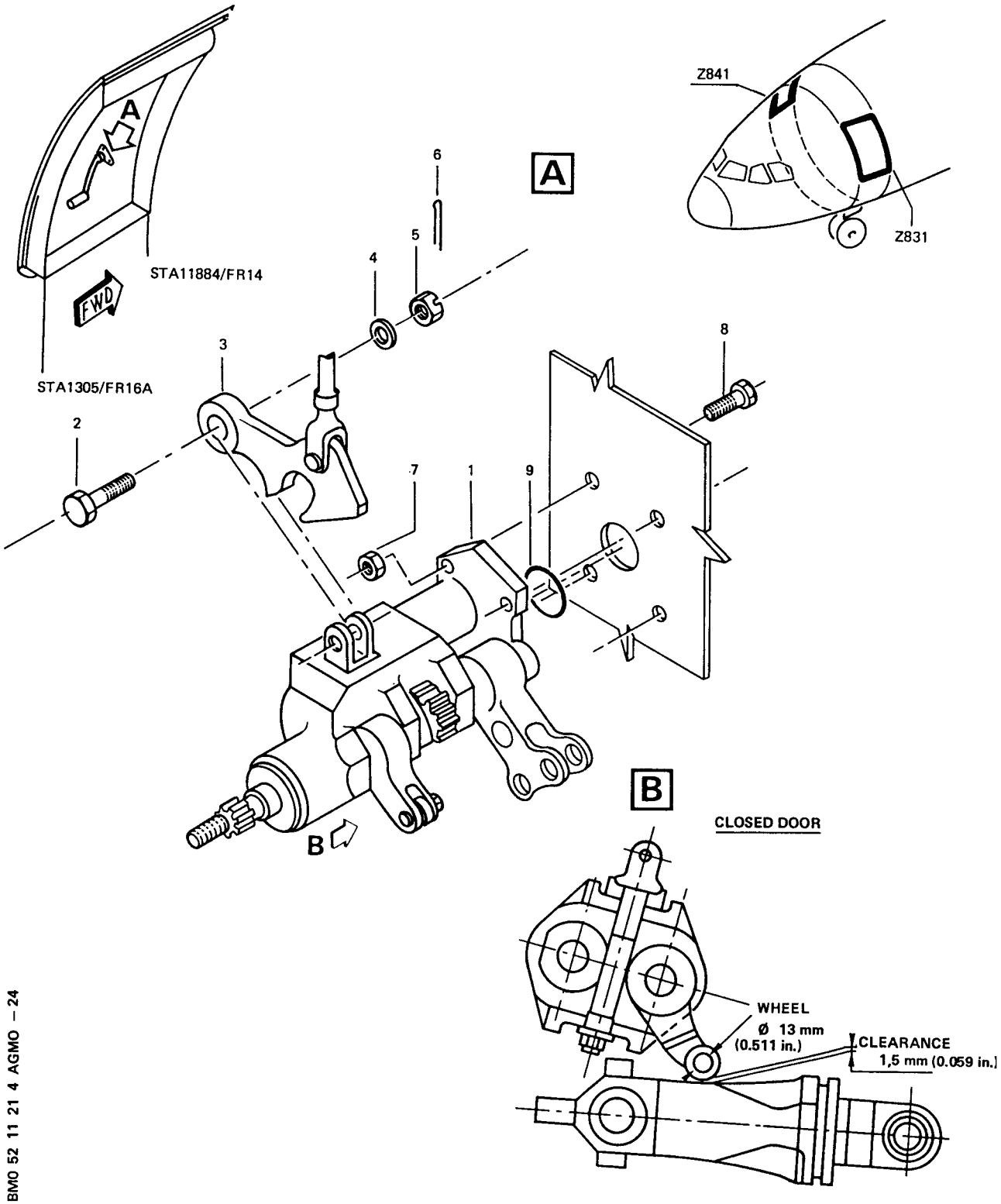


BM0 52 11 21 4 ACMO

Interior Control Handle and Latch Assy
Figure 404

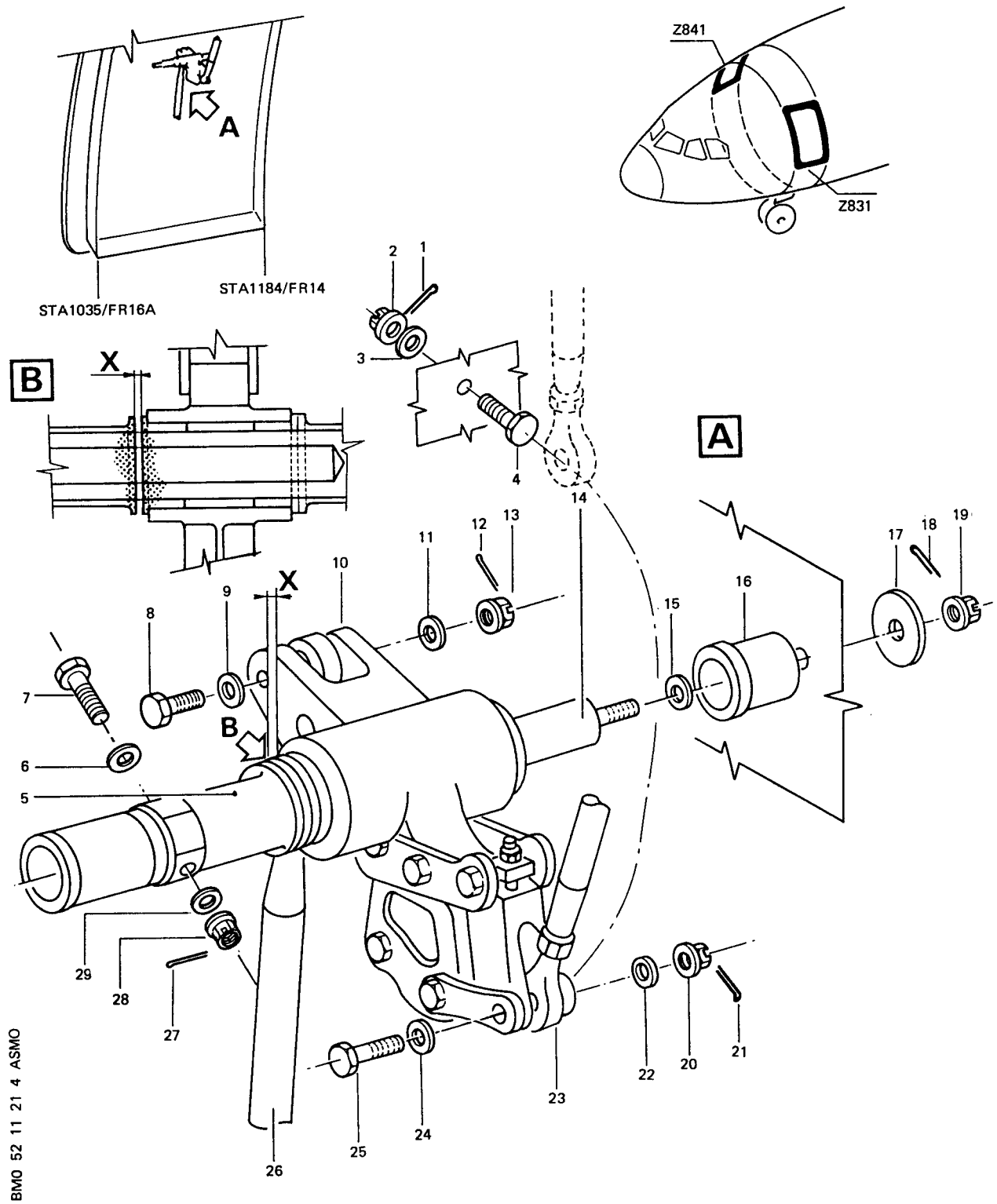


Exterior Control Handle
Figure 405



BMO 52 11 21 4 AGMO – 24

Gearbox and Locking Hook
Figure 406



Twin Lever
Figure 407

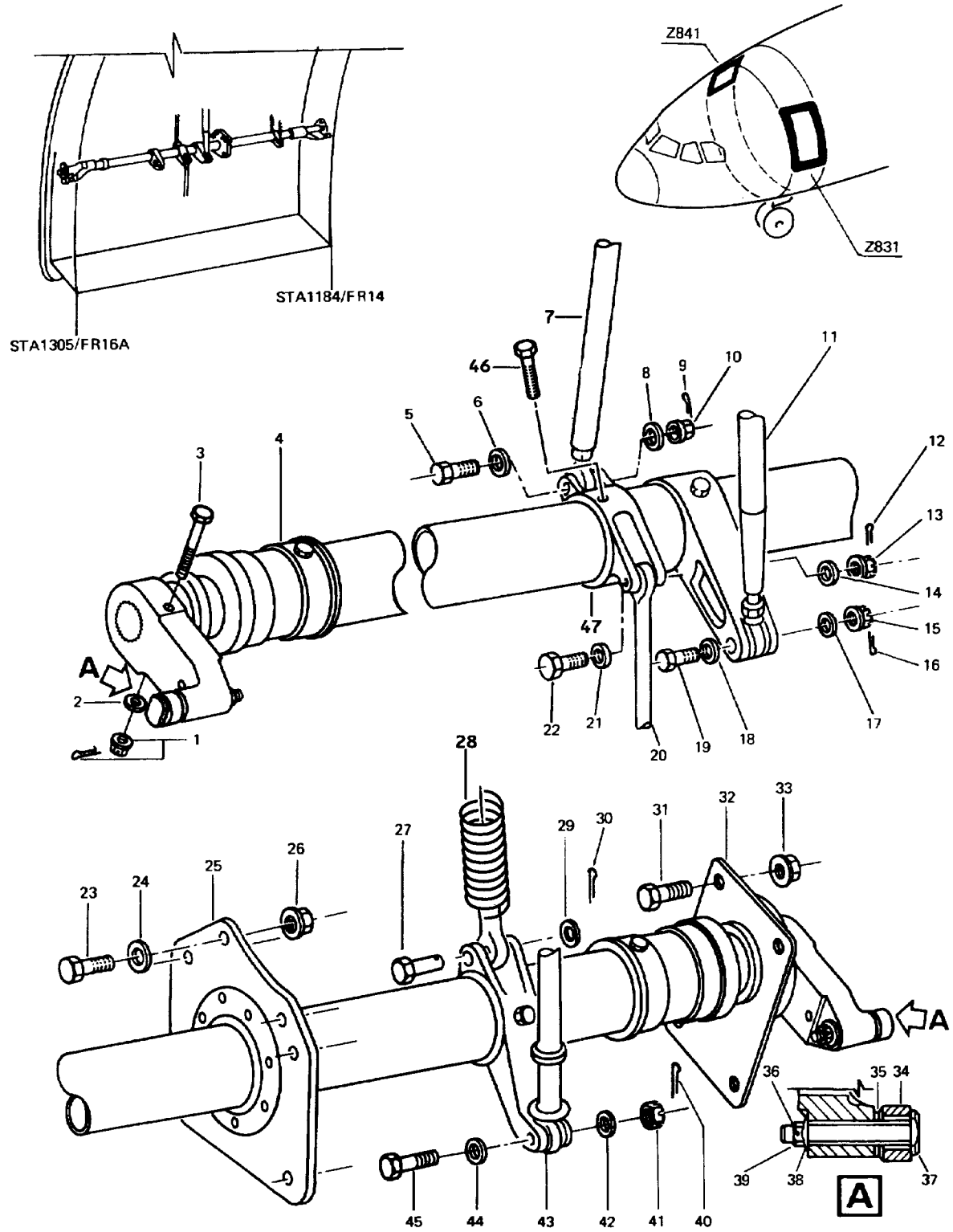
washer (22), remove bolt (25) and washer (24).
(b)Disconnect pushrod (26), remove cotter pin (12), nut (13), retain washer (11), remove bolt (8) and washer (9).
(c)Remove cotter pin (27), nut (28), retain washer (29), remove bolt (7) and washer (6).
(d)Remove cotter pin (18), nut (19), remove washer (17).
(e)Push the assembly towards the aft of the door. When shaft (14) is free from forward support, remove bush (16) and adjusting washer (15).
(f)Remove bellcrank (10) and stop (5). Remove shaft (14) rearwards.

(9)Lifting shaft (Ref. Fig. 408,)
(a)When door is open, disengage latching hook of door locking mechanism in high position and push interior control handle downwards.
(b)Disconnect lower rod of escape slide locking control.
(c)Disconnect pushrod (11). Remove cotter pin (16), nut (15), retain washer (17), remove bolt (19) and washer (18).
(d)Remove compensation mechanism pushrod (20). Remove cotter pin (12), nut (13), retain washer (14), remove bolt (22) and washer (21).
(e)Disconnect connection link pushrod (7); remove cotter pin (9), nut (10), retain washer (8), remove bolt (5) and washer (6).
(f)Disconnect spring (28) and the rod (43) : remove cotter pin (30), retain washer (29); remove bolt (27).
Remove cotter pin (40), nut (41), bolt (45); retain washers (42), and (44).
(g)Remove bearing housing (25) : remove nuts (26), bolts (23) and washers (24).
(h)Note the angular position of aft lifting arm with respect to lifting shaft (4); remove lifting shaft. Remove cotter pin, nut (1), retain washer (2); remove bolt (3). Remove the aft lifting arm.
(j)Remove the forward bearing housing (32) : remove the four nuts (33) and the four bolts (31).
(k)Remove shaft assembly (4).

R NOTE: If necessay, loosen the bolt (46) and release the
R bellcrank 47, (vertical being next to the bellcrank could prevent
R mechanism removal).

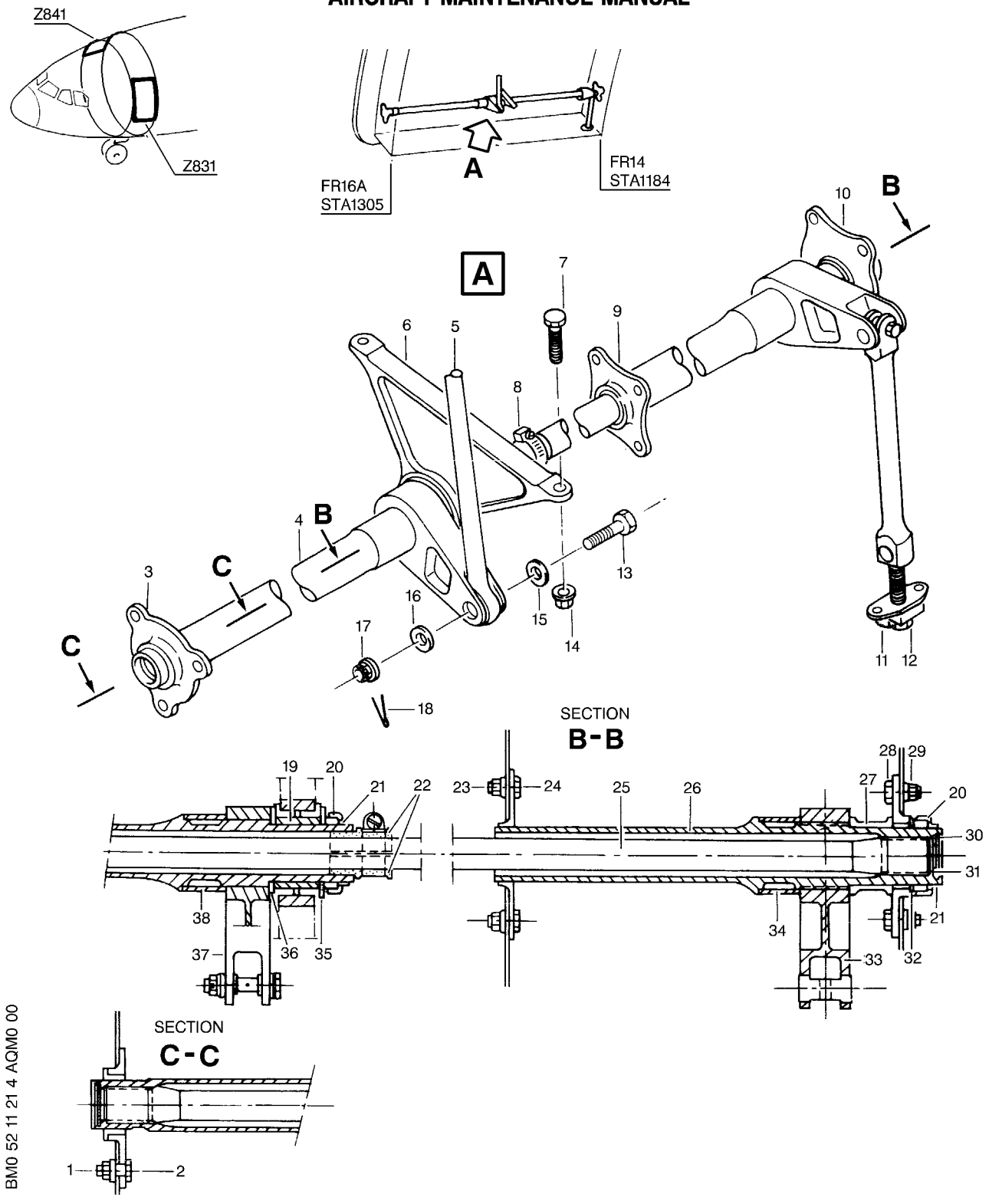
(l)Remove rollers (34); remove cotter pins (36), nuts (39); retain washers (38); remove bolts (37); retain spacer (35) and roller (34).

(10)Torsion bar spring and torque shaft (Ref. Fig. 409,)
(a)Cut and remove lockwire (11), remove screw (12).
(b)Disconnect pushrod (5). Remove cotter pin (18), nut (17), remove remove bolt (13) and washers (15) and (16).
(c)Remove hose clip (8). Remove the two anti-vibration half rings (22).
(d)Remove circlips (30) and washer (31). Remove torsion bar by pushing it towards the front of the door.
NOTE : Take care not to damage torsion bar splines.
(e)Unlock nuts (20), remove lockwashers (21), nuts (20). Push splined shaft (26) towards the aft of the door in order to remove it from forward bearing flange (10). Retain washer (32). Remove spacer (27), bellcrank (33) and spacer (34).
(f)Remove forward bearing flange (10); remove the four nuts (29), bolts (28). Remove splined shaft (26).
(g)Remove bearing flange (9); remove the four nuts (23), bolts (24).



BMO 52 11 21 4 ANMO 02

Door Lifting Mechanism
Figure 408



Torsion Bar Spring and Torque Shaft
Figure 409

R

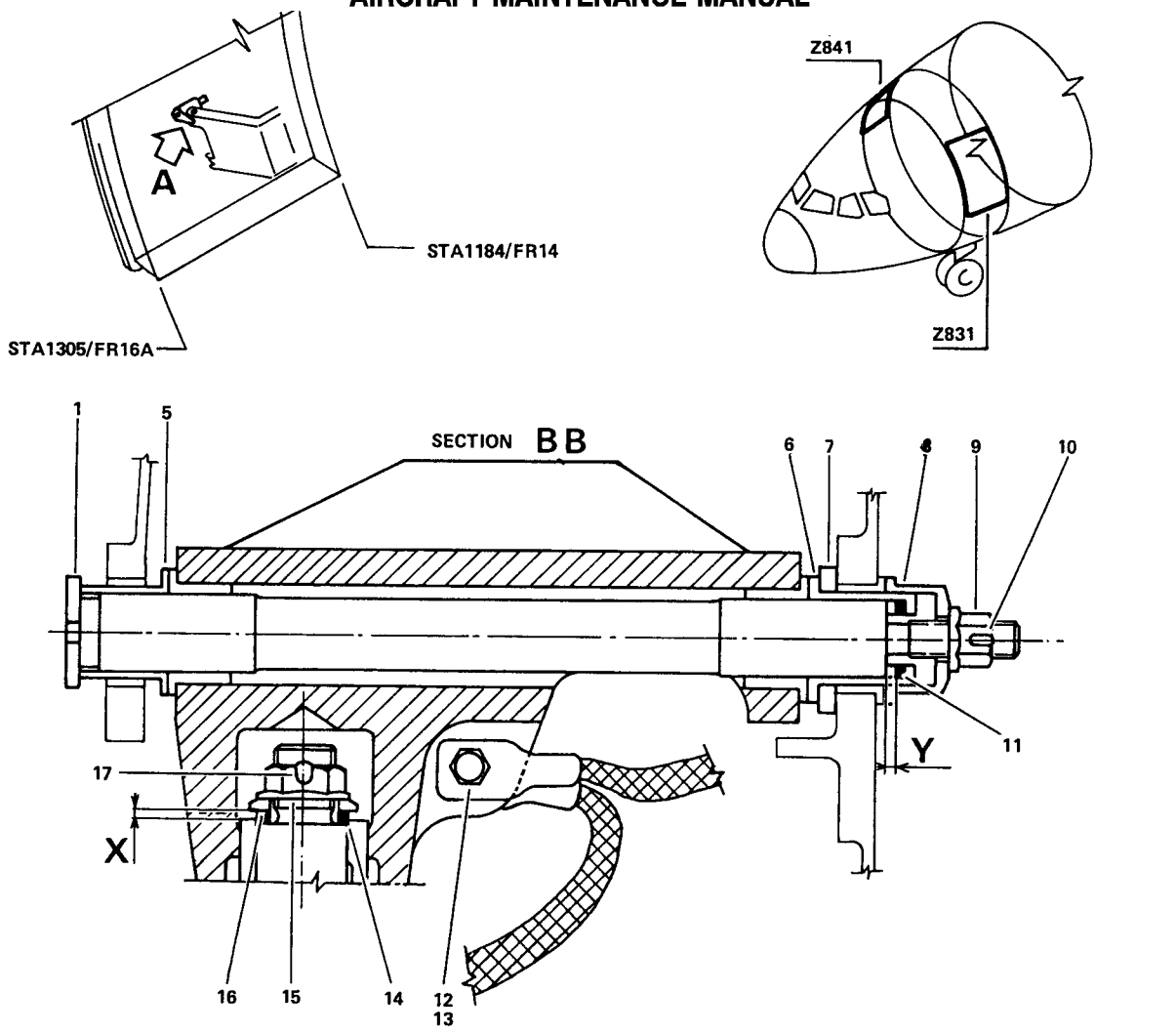
(h)Remove bearing flange (6), remove the two nuts (14), bolts (7), remove bearing flange (6), retain washer (35). Remove spacer (19).
(j)Remove washer (36), bellcrank (37) and spacer (38), remove torque tube (4) from aft bearing flange.
(k)Remove aft bearing flange (3), remove the three nuts (1), bolts (2).
(l)Remove torque tube (4) towards the aft of the door.

(11)Upper connection link (Ref. Fig. 410,)
(a)Push door against frame. Lift exterior control handle half way up.
(b)Remove cotter pin (10), nut (9), bush (8). Close the door.
door.
(c)Remove bonding strips. Remove nut (12), bolt (13) and bonding strips (3).
(d)Remove cotter pin (23), nut (22), retain washer (21), remove bolt (19), retain chromium plated washers (20).
(e)Remove hinge pin (1). Remove connection link (2). Retain bushing (5) shouldered bushing (6) and adjustment washers (11) and (7).
(f)On ground. Remove bushing (4) from connection link (2). Retain adjustment washer (18). Remove cotter pin (17), nut (15). Retain washer (16) and adjustment washer (14). Remove bushing (4) from fork end (25).

(12)Lower connection link (Ref. Fig. 411,)
(a)Close the door.
(b)Remove bonding strips. Remove nut (12), bolt (13) and bonding strips (3).
(c)Remove cotter pin (22), nut (21), retain washer (20); remove bolt (18), retain chromium plated washers (19).
(d)Remove cotter pin (6), nut (7), remove bush (8). Remove hinge pin (5). Slowly lift interior control handle until it is possible to remove bushing (26) shouldered bushing (10) and adjustment washers (9) and (11).
(e)Push interior control handle downwards. Withdraw connection link (2) as far as possible in order to gain access to rod (1) pin. Remove cotter pin (27), loosen nut (28), retain washer (29), remove bolt (31) and washer (30).
(f)Remove connection link (2).
(g)On ground : remove bushing (4) from connection link (2). Retain adjustment washer (17).
Remove cotter pin (25), nut (14), retain washer (15) and adjustment washer (16). Remove bushing (4) from fork end (24).

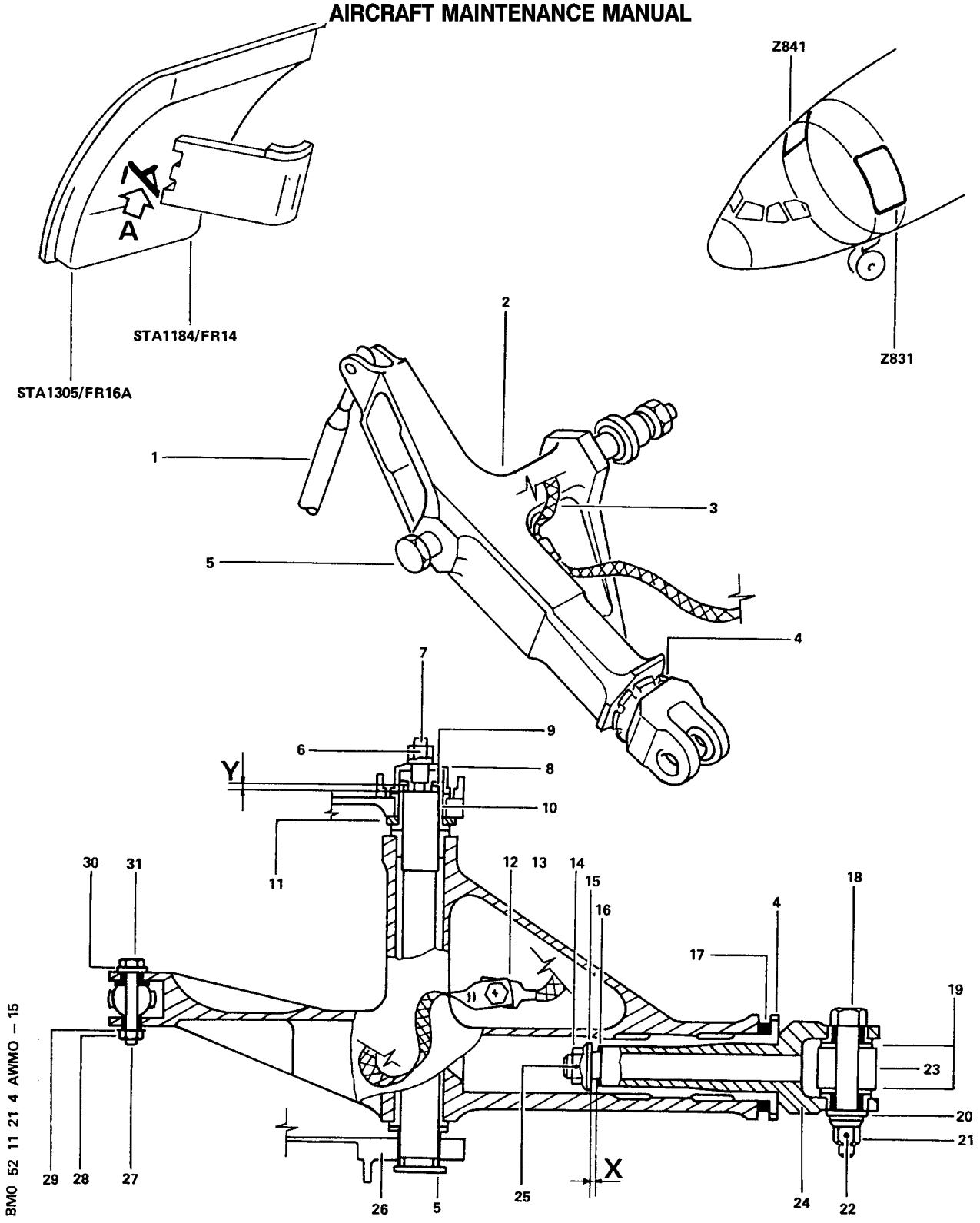
C. Preparation of Replacement Components

(1)Door Latches and Lining Hinge Arms
(Ref. Fig. 412,)
(a)Adjustment between bellcrank (1) and support (2).
(Ref. Fig. 402, 412)
(Ref. Fig. ,)
1 Remove cotter pin (50), unscrew and remove nut (49) and recover washer (40).
2 Maintain and slightly compress spring rod (47), then remove bolt (52) and recover washer (51).
3 On support assemblies (2), remove nut (6), bolt (5) and retained shims

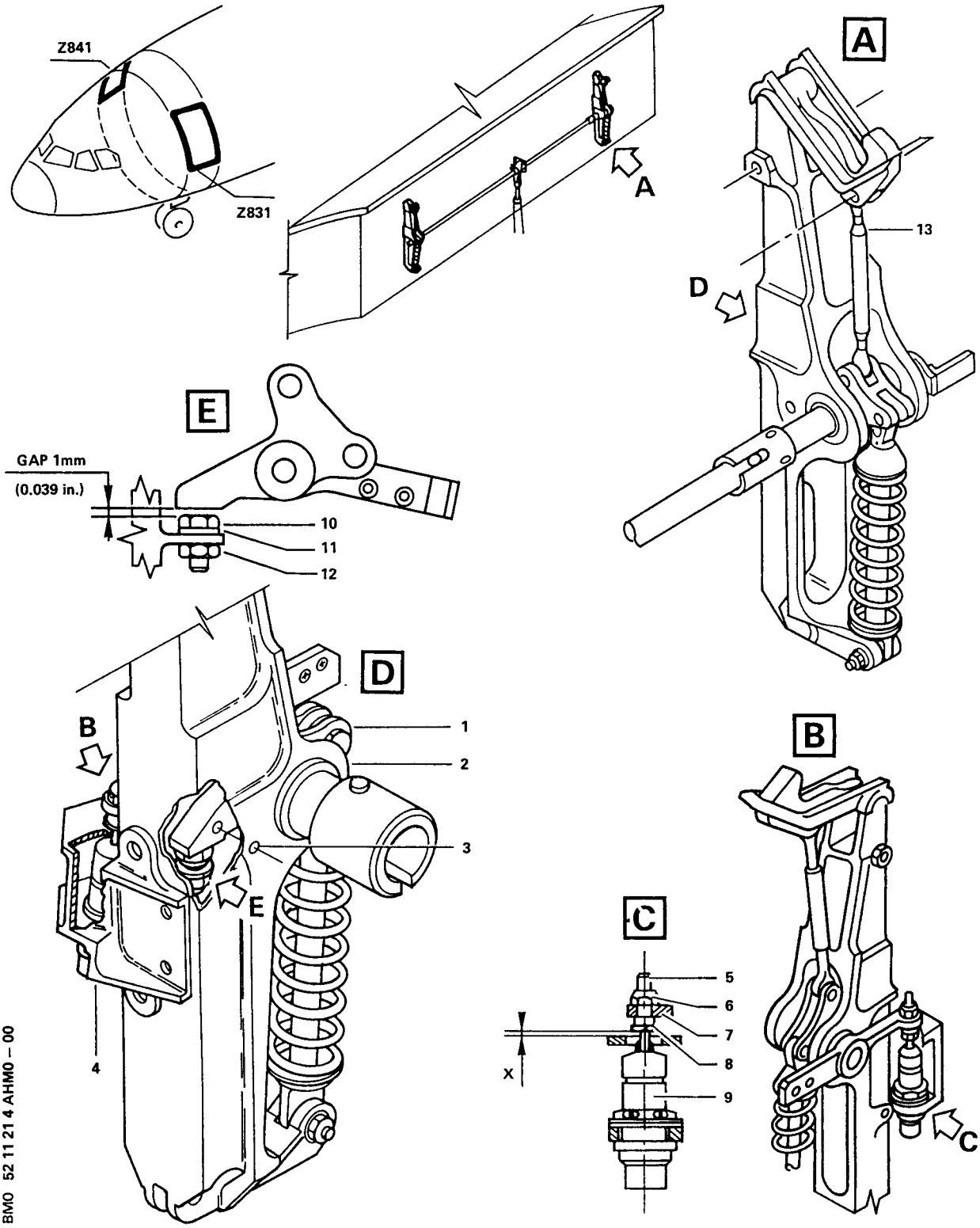


BMO 52 11 21 4 AUMO – 12

Upper Connection Link
Figure 410



Lower Connection Link
Figure 411



Adjustment
Figure 412

(8).

4 Check adjustment of bellcrank stop. Install rigging pin on bellcrank (1) and support (2). Diameter of pin (3) : 6 mm (0.2362 in.).

5 Measure gap between bellcrank (1) and support (2) and perform adjustment of shim (10) for obtaining a gap of 1 mm (0.039 in.).

6 Check adjustment between bellcrank (1) and bolt (9) with feeler gage 1 mm (0.039 in.) to measure the gap.
NOTE : Bellcrank (1) is stopped on support assemblies (2). This gap creates a new overcenter of 4 mm (0.157 in.) on rod assemblies (13).

7 Slightly grease splined shaft splines with Mat. No. 04-004.

8 Remove rigging pin (3) and install bolt (10) with shim (11), tighten nut (12). TORQUE to between 0.7 and 0.8 m.daN (62 and 71 lbf.in.).

9 Maintain and slightly compress spring rod (47), then install bolt (52) with washer (51) install washer (48), screw nut (49). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.) install cotter pin.

D. Installation

(1)Locking shaft (Ref. Fig. 401,)

(a)Install locking shaft (10) ; align the locking shaft yokes (43) with splined shafts (42). (Ref. Fig. 402,) (Section B-B). Fully engage splined shafts ; install indicating plate, washer (41) ; tighten bolt (40), wirelock with lockwire (44).

(b)Install flange plates (9), bolts (8), nuts (7). TORQUE to between 0.7 and 0.8 m.daN (62 to 71 lbf.in.).

(c)Install pushrod (1), bolt (2), washers (3) (4) ; tighten nut (6). TORQUE to between 0.3 and 0.35 m.daN (26.5 and 31 lbf.in.), install safety pin (5).

(d)Install shaft (14) and movable flap supports.
Install spacers (24) ; install shaft (14) yokes in front of supports (13). Install bolts (26), washers (23) (25) ; tighten nut (22). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin (21).

(e)Install spacers (29) and connect the two upper levers (12) to support (11). Install bolts (27), washers (28) (30) ; tighten nuts (31). TORQUE to between 0.17 and 0.20 m.daN (15 and 18 lbf.in.). Install cotter pin (32).

(f)Install spacer (16) ; connect rod (17) to shaft (10) bellcrank. Install bolt (15), washer (18) and nut (19). TORQUE to between 0.17 and 0.20 m.daN (15 and 18 lbf.in.). Install cotter pin (20).

(g)Carry out the adjustment/test of door latches (Ref. 52-10-11, P. Block 501).

(2)Door latches and lining hinge arms (Ref. Fig. 402, 412) (Ref. Fig. ,)

(a)Installation of microswitch bracket (4) on support assemblies (2) (Ref. Fig. 412,). Remove sealant to interfaces of structure ; clean surfaces to be sealed. Apply sealant Material No. 09-013 (Ref. 20-31-00). Crimp microswitch bracket (4) on support assemblies (2). Renew protective finish using material No. 16-002, 16-006 (Ref. 20-31-00).

(b)Install support assemblies (39), install bolts (35) (37) and nuts (36) (38) ; hand tighten. (Ref. Fig. 402,).

(c)Align the locking shaft yokes (43) with splined shafts (42). Fully engage splined shafts ; install indicating plate, washer (41) ; tighten bolt (40), safety with lockwire (44) ; tighten nut (36) (38). TORQUE to between 0.70 and 0.8 m.daN (62 and 71 lbf.in.).

(d)Adjustment of microswitch (9) (Ref. Fig. 412,)

1 Unlock passenger crew door.

2 Remove and retain nut (6), screw (5) and washers (8) from operating lever (7).

3 Lock passenger, crewdoor. Disconnect electrical plug from switch (9) and connect adjustment test box 35M5M0-116-0001 or equivalent. Fully press in switch (9) manually. Slip out switch (9) until the initial operating point is reached (electrical signal visible on test box.)

4 Measure gap "X" between microswitch roller and operating lever (7), then add 3.0 ± 0.1 mm (0.118 in. ± 0.004 in.) subtract bolt head thickness 3 mm (0.118 in.). Determine required number of washers which equal thickness calculated.

NOTE : Tolerance of calculated thickness is ± 0.1 mm (0.004 in.).

5 Disconnect adjustment test box and connect microswitches.

6 Unlock passenger/crew door. Install screw (5) with washer (8) and tighten nut (6). TORQUE to between 0.70 and 0.80 m.daN (62 and 71 lbf.in.).

(e)Carry out the adjustment/test of door latches (Ref. 52-10-11, P. Block 501).

(3)Lowering shaft (Ref. Fig. 403,)

(a)Offer up aft plate : insert the three bolts (17) tighten nuts (12). TORQUE to between 0.35 and 0.45 m.daN (between 31 and 40 lbf.in.).

(b)Install lowering shaft (1) in aft plate (13). Install plate (5) in control shaft. Install the four bolts (10), tighten nuts (9). TORQUE to between 0.35 and 0.45 m.daN (between 31 and 40 lbf.in.). Install washer (8), tighten nut (7). TORQUE to between 0.30 and 0.35 m.daN (between 26.5 and 31 lbf.in.). Install cotter pin.

(c)Compress spring rod (11), engage pins (4), install washers (3). Install circlips (2).

(d)Offer up hook (22) on gearbox. Insert bolt (23), install washer (21), tighten nut (20). TORQUE to between 0.17 and 0.20 m.daN (between 15 and 18 lbf.in.).
Install cotter pin.

(e)Install rod (18). Insert bolt (10), install washers (14), tighten nuts (15). TORQUE to between 0.17 and 0.20 m.daN (between 15 and 18 lbf.in.)
Install cotter pin.

(f)Install rollers (25) : Install spacer (26), roller (25) and washer (24) on bolt (27). Install bolt assy on lever.
Install washer (28) and nut (29), tighten nut (29). TORQUE to between 0.57 and 0.65 m. daN (between 50 and 57.5 lbf.in.). Install cotter pin.

(4)Interior control handle
Covered in paragraph 3.D.(5)

(5)Interior control handle latch assy (Ref. Fig. 404,)

(a)Insert handle (10) in pin splines; position handle correctly.

(b)Insert washer (3), tighten nut (2).

(c)Insert the two locking assembly pins in their location.

(d)Install washers (6) (9); tighten nuts (5) (7).
(e)Carry out adjustment/test of interior control handle and locking assembly (Ref. 52-10-20, P. Block 501).
(f)Tighten nut (2). TORQUE to between 0.57 and 0.65 m.daN (50 and 57 lbf.in.). Install cotter pin.
(g)Wirelock nut (5).
(h)Tighten nut (7). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.

(6)Exterior control handle (Ref. Fig. 405,)
(a)Offer up handle (2) and adjustment washer (6) in its housing.
(b)Install pin (1), with line engraved on pin head correctly positioned.
(c)Install washer (3). Do not fully tighten nut (5) at this stage.
(d)Make certain that clearance is correct between handle and structure : clearance 1 mm ± 0.5 (0.04 ± 0.02 in.).
If clearance is not correct (either towards the front or towards the aft), remove pin (1) again and increase or decrease adjustment washer (6) thickness. Complete handle adjustment if necessary.
(e)Install the three bolts (8) equipped with washers (9). Offer up support fitting (10). Tighten nuts (11). TORQUE to between 0.7 and 0.8 m.daN (62 and 71 lbf.in.).
(f)Tighten nut (5). TORQUE to between 0.57 and 0.65 m.daN (50 and 57 lbf.in.). Install cotter pin.
(g)Install pushrods hinge pins (7). Tighten nuts. TORQUE to between 0.3 and 0.35 m.daN (26.5 and 31.5 lbf.in.).
(h)Install interior control handle (Ref. para. 3 D (5).
(j)Operate the handles several times to make certain that the door opening system operates correctly. Install the exterior access door (two screws).
(k)Adjust exterior control handle (Ref. 52-10-20, P. Block 501).

(7)Gearbox and locking hook (Ref. Fig. 406,)
(a)Install a new O-ring (9) and install gearbox.
(b)Install the four screws (8) and the four nuts (7). Tighten nuts. TORQUE to between 0.7 and 0.8 m.daN (62 and 71 lbf.in.).
(c)Install hook (3) on gearbox (1).
Install bolt (2), washer (4); tighten nut (5). TORQUE to between 0.30 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.
(d)Install interior and exterior control handles (Ref. para. 3. D (5) and 3. D (6)).
(e)Operate the handle several times to make certain that the door opening system operates correctly.
NOTE : After installation, door closed, make certain that clearance between roller and the hinge arm is of at least 1.5 mm (0.059 in.).

(8)Twin lever (Ref. Fig. 407,)
(a)Install shaft (14), leave a sufficient space between the end and forward support in order to enable installation of the other components.
(b)Install stop (5) on shaft in such a way that hole for bolt (7) is visible; install bellcrank (10) and thickness adjusting washer (15) : thickness 3 mm (0.118 in.). Install bush (16). Install bolt (7) and washer (6).

(c)Push the assembly towards the front. Install washer (17), tighten nut (19). Install washer (29), tighten nut (28). TORQUE to between 0.17 and 0.20 m.daN (between 15 and 18 lbf.in.).
Install cotter pin.
(d)Measure clearance (x dimension). This clearance must be included between 0 and 0.2 mm (0 and 0.007 in.). If necessary, replace adjusting washer (15) by a thinner washer. Thickness of the new washer will be 3 mm/0.118 in. - (clearance measured - 0.1 mm/0.004 in.).
(e)Tighten nut (19). TORQUE to between 0.57 and 0.65 m.daN (between 50 and 57.5 lbf.in.). Install cotter pin. Make certain that bellcrank (10) rotates correctly.
(f)Connect pushrod (23). Install bolt (25) and washers (22), tighten nut (20). TORQUE to between 0.30 and 0.35 m.daN (between 26.5 and 31 lbf.in.). Install cotter pin.
(g)Connect rod (26). Install bolt (8) and washers (9) and (11), tighten nut (13). TORQUE to between 0.3 and 0.35 m.daN (between 26.5 and 31 lbf.in.). Install cotter pin.
(h)Items (1), (2), (3), (4) serve for adjustment of door in closed position. Push rod (23) end contacts bolt (4).
(j)Carry out adjustment of door closed position, door high position and locking of door mechanism in high position (Ref. 52-10-20, P. Block 501).
(k)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).

(9)Lifting shaft (Ref. Fig. 408,)
(a)Install rollers (34) : install roller (34) and spacer (35) on bolt (37); engage bolt assemblies on lifting shafts; install washers (38); tighten nuts (39). TORQUE to between 0.35 and 0.45 m.daN (31 to 40 lbf. in.). Install cotter pin.
(b)Install shaft assembly (4).
(c)Install forward bearing housing (32). Engage the 4 bolts (31); hand tighten nuts (33).
(d)Install bearing housing (25); install bolt (23), washers (24), nuts (26).
(e)Tighten the two lower nuts of bearing housing (25); TORQUE to between 0.35 and 0.45 m.daN (31 and 40 lbf.in.). Tighten the remaining nuts (26) and (33). TORQUE to between 0.7 and 0.8 m.daN (62 and 71 lbf. in).
(f)Make certain that shaft (4) rotates correctly.
(g)Install aft lifting arm in correct position with respect to shaft (4). Insert bolt (3), washer (2); tighten nut (1). TORQUE to between 0.35 and 0.45 m.daN (31 and 40 lbf.in.). Install cotter pin.
(h)Install locking mechanism spring (28) and the rod (43). Install bolt (27), washer (29) and cotter pin.
Install bolt (45) and washers (42) (44). Tighten nut (41). TORQUE to between 0.35 and 0.45 m.daN (31 and 40 lbf. in.). Install cotter pin.
NOTE : If bellcrank (47) was released in the removal put in position the bellcrank (47) and tighten the bolt (46).
(j)Install pushrod (7). Install bolt (5), washers (6) and (8); tighten nut (10). TORQUE to between 0.57 and 0.65 m.daN (50 and 57.5 lbf. in.). Install cotter pin.

(k)Install compensation mechanism pushrod (20). Install bolt (22) and washers (14) (21); tighten nut (13). TORQUE to between 0.3 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.

(l)Install pushrod (11). Install bolt (19), washers (17)(18). Tighten nut (15). TORQUE to between 0.3 and 0.35 m.daN (26.5 and 31 lbf.in.). Install cotter pin.

(m)Install the lower rod of escape slide locking control. Tighten nuts. TORQUE to between 0.3 and 0.35 m.daN (26.5 and 31 lbf. in.). Install cotter pin.

(n)Carry out adjustment of door closed position, door high position and locking of door mechanism in high position (Ref. 52-10-20, P. Block 501).

(o)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).

(10)Torsion bar spring and torque shaft (Ref. Fig. 409,)

(a)Install torque tube (4).

(b)Install aft bearing flange (3), install bolts (2), hand tighten nuts (1).

(c)On torque tube (4) : install spacer (38), bellcrank (37), do not alter the angular setting of torque tube and bellcrank. Install washer (36), spacer (19) and support bearing flange (6).

(d)Install torque tube (4) in aft bearing flange (3). Insert the two bolts (7), install support bearing housing (6) and nuts (14); hand tighten. Install washer (35) and nut (20); hand tighten, install lockwasher (21).

(e)Install splined shaft (26). Install bearing flange (9) in splined shaft (26). When the splined shaft is completely pushed towards the aft of the door, insert spacer (34), bellcrank (33); do not alter the angular setting of splined shaft (26) and bellcrank (33). Install spacer (27).

(f)Install forward bearing flange (10). Install bolts (28), and nuts (29); do not tighten at this stage. Install splined shaft in forward flange (10), by pushing it fully.
Install bolts (24), hand tighten nuts (23).

(g)Install washer (32), insert nut (20) by hand and install lockwasher (21).

(h)Install torsion bar (25). Insert it through splined shaft (26).

CAUTION : POSITION TORQUE TUBE (25) AND SPLINED SHAFT SO THAT WHEN THE TORSION BAR (25) IS COMPLETELY ENGAGED, BELLCRANKS (33) AND (37) MAKE AN ANGLE OF 90°.
HIGHER POSITION.

NOTE : Angle between adjacent splines on torsion bar (25) is 30°.
- Insert torsion bar (25) completely.

(j)Tighten nuts (20), lock with lockwashers (20).

(k)Install washer (31), install circlips (30).

(l)Tighten nuts :
item 14 : TORQUE to between 0.7 and 0.8 m.daN (between 62 and 71 lbf. in.).
item 1, 23, 29 : TORQUE to between 0.35 and 0.45 m.daN (between 31 and 40 lbf.in.).

(m)Install the two anti-vibration half rings (22). Tighten hose clip (8).

(n)Make certain that the compensation assembly rotates correctly.
(p)Connect pushrod (5). Install bolt (13) and washers (15) and (16); tighten nut (17). TORQUE to between 0.3 and 0.35 m.daN (between 26.5 and 31 lbf.in.). Install cotter pin.
(q)Install screw (12).
(r)Carry out adjustment of the compensation mechanism (Ref. 52-10-11, P. Block 501).

(11)Upper connection link (Ref. Fig. 410,)
(a)Lubricate contact surfaces (use Material No. 04-004) and install fork end (25) in bushing (4). Install an adjusting washer (14). Insert washer (16). Tighten nut (15). Make certain that clearance (x) is comprised between 0.5 and 0.1 mm (0.002 and 0.004 in.). If necessary install an adjusting washer (14) of a different thickness. Tighten nut (15). TORQUE to between 3.9 and 4.5 m.daN (between 346 and 400 lbf.in.). Install cotter pin.
(b)Install washer (18); install bushing (4) on connection link. Hand tighten.
(c)On door : install shouldered bushing (6) and ring (5).
Install connection link (2), insert pin (1).
(d)Connect connection link to support arm (Ref. 52-11-11, P. Block 401).
(e)Adjustments
1 Adjust connection link (Ref. 52-10-12, P. Block 501).
2 When thickness of adjusting washer (7) is determined, install adjusting washer (11) the thickness being such that clearance (y) is comprised between 0.05 and 0.1 mm (0.002 and 0.004 in.).
3 Complete installation of connection link. Insert pin (1), install washer (8), tighten nut (9) TORQUE to between 1.17 and 1.35 m.daN (between 104 and 120 lbf.in.). Install cotter pin.
4 Install bonding strips, install screw (13), tighten nut (12). Apply a coat of lacquer (Material No.07-001).
5 Tighten bushing (4). TORQUE to between 8 and 10 m.daN (between 59 and 73.8 lbf.ft.). Safety bushing (4).
6 Operate the door to make certain that the suspension arm rotates normally.

(12)Lower connection link (Ref. Fig. 411,)
(a)Lubricate contact surfaces with material No.04-004 and install fork end (24) in bushing (4). Install an adjustment washer (16), interpose washer (15), tighten nut (14). Make certain that clearance X is comprised between 0.05 and 0.1 mm (0.002 and 0.004 in.). If necessary, place an adjustment washer of a different thickness; tighten nut (14). TORQUE to between 3.9 and 4.5 m.daN (between 346 and 400 lbf.in.). Install cotter pin.
(b)Install washer (17) and manually screw bushing (4) in connection link (2).
(c)On door. Install connection link (2). Install rod (1). Install bolt (31) and washers (30) and (29), tighten nut (28). TORQUE to between 0.57 and 0.65 m.daN (between 50 and 57.5 lbf.in.). Install cotter pin.
(d)Install shouldered bushing (10) and bushing (26). Install bolt (5).
(e)Install connection link on support arm (Ref. 52-11-11, P. Block 401).
(f)Adjustments

1 Adjust connection link (Ref. 52-10-12, P. Block 501).
2 When the thickness of adjusting washer (11) is determined, install an adjustment washer (9) the thickness being such that clearance is comprised between 0.05 and 0.1 mm (0.002 and 0.004 in.).
3 Complete installation of connection link. Install bolt (5). Install bush (8), tighten nut (7). TORQUE to between 1.17 and 1.35 m.daN (between 104 and 120 lbf.in.). Install cotter pin.
4 Install bonding strips, install bolt (13), tighten nut (12). Smear with lacquer (Material No.07-001).
5 Tighten bushing (4). TORQUE to between 8 and 10 m.daN (59 and 73.8 lbf.ft.). Wirelock bushing (4).
6 Operate the door to make certain that connection link rotates correctly.

E. Close-Up
(1)If necessary, remove ballast weight.
(2)Install door lining (Ref. 52-10-13, P. Block 401).
(3)If necessary, install escape slide container (Ref. 25-61-11, P. Block 401).
(4)Arm emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(5)Remove access platform.

AFT PASSENGER/CREW DOOR - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH AFT passenger/crew doors are identical in design and function but are opposite hand. Only the LH passenger/crew door is described and illustrated.

1. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 4.50 m (14.7 ft.)
	B.	Crane (Max. door weight is approx. 196 kg (432 lb.)
	C. 98A52108004000	Hoisting Sling - Passenger/Crew Doors, LH, RH
R	D. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft,
R		Passenger/Crew Doors LH and RH
	or	
R	98A52108008001	Support Frame - Ballast Weight, Doors
R		NOTE : The support frame PN 98A52108008001
R		must be used with the appropriate
R		ballast weight.
	E.	Torque Wrench, up to 0.6 m.daN (53 lbf.in.)
	F.	Cotter Pins
	G.	Nut 1/4-28 UNF for Removal/Installation of Spring Unit
	H. Material No. 04-004	Common Greases (Ref. 20-31-00)
	J. Material No. 05-002	Special Materials (Ref. 20-31-00)
	K. Material No. 05-052	Special Materials (Ref. 20-31-00)
	L. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
	M. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 11-20-00, P. Block 1 — Exterior Placards and Markings
- 20-28-11, P. Block 1 — Electrical Bonding
- 25-61-21, P. Block 401 — Dual Escape Slide
- 25-61-22, P. Block 401 — Slide/Raft
- 52-10-00, P. Block 301 — Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501 — FWD, AFT Passenger/Crew Doors
- 52-10-12, P. Block 501 — FWD, AFT Door Suspension
- 52-10-13, P. Block 401 — FWD, AFT Door Lining and Insulation
- 52-10-14, P. Block 501 — FWD, AFT Door Damper and Emergency Operation Cylinder
- 52-10-20, P. Block 501 — FWD, AFT Door Locking Mechanism
- 52-10-30, P. Block 501 — FWD, AFT Emergency Escape Slide Release Mechanism

**ON A/C 001-003,

- 52-13-12, P. Block 401	Suspension
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

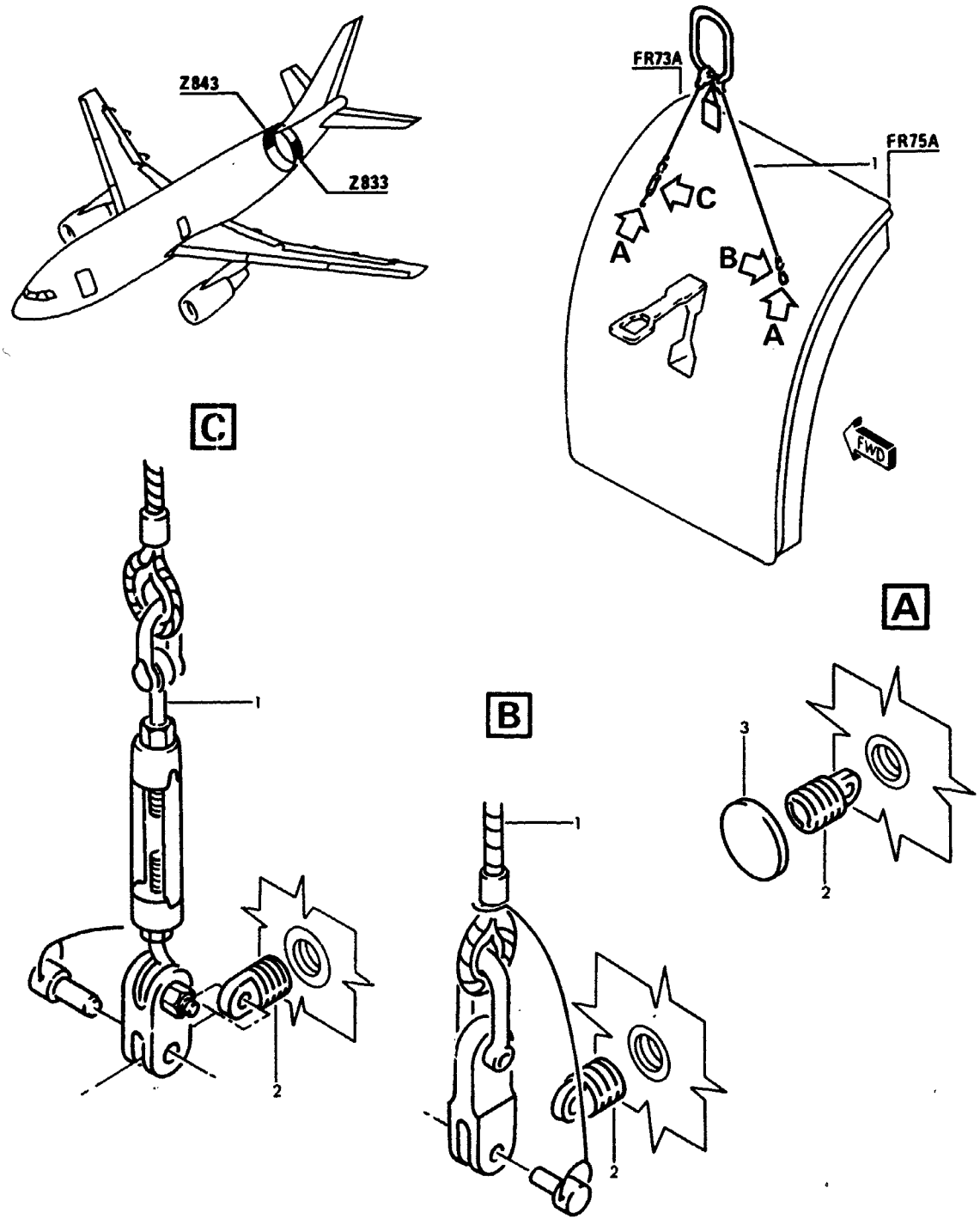
- 52-13-12, P. Block 401 Suspension
- 52-71-11, P. Block 501 Door Warning Switches
- 52-73-00, P. Block 501 Emergency Escape Slide Release and Residual Pressure Warning
- 52-73-13, P. Block 501 Limit Switch

**ON A/C ALL

2. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Remove escape slide, if installed (Ref. 25-61-21, P. Block 401).
(4)Remove slide raft, if installed (Ref. 25-61-22, P. Block 401).
(5)Remove door lining and insulation as required (Ref. 52-10-13, P. Block 401).
(6)Open door.
(7)Install passenger door sling (1) P/N 98A52108004000 (Ref. Fig. 401).
(a)Remove self-adhesive discs (3) covering hoisting points.
(b)Remove hoisting lugs (2) and install in reverse position in door.
(c)Position crane and attach passenger door sling (1) P/N 98A52108004000 to door.
(8)Lift door sufficiently to remove load from support arm.

B. Removal
(1)Disconnect electrical harness 1704VB (1702VB) (Ref. Fig. 402).
(a)Remove nut (24), screw (22), washer (21), clip (20) and sleeve halves (23) from electrical harness 1704VB (1702VB).
(b)Record wire location of electrical harness 1704VB (1702VB) in terminal block 6002VT (6001VT) for subsequent installation.
(c)Disconnect electrical harness 1704VB (1702VB) from terminal block 6002VT (6001VT) and remove from door.
(2)Disconnect upper and lower guide arms (Ref. Fig. 402).
(a)Remove cotter pins (15), nuts (16), washers (11) and bolts (10).
(b)Support guide arms (13) clear of hinge fittings (17) and remove bushes (12, 14).
(3)Disconnect support arm from fuselage door frame (Ref. Fig. 403).
(a)Install nut (53) to secure spring unit (45).
(b)Disconnect support arm from fuselage door frame (Ref. 52-13-12, P. Block 401).
(4)Move door clear of fuselage and lower onto suitable support. Make certain

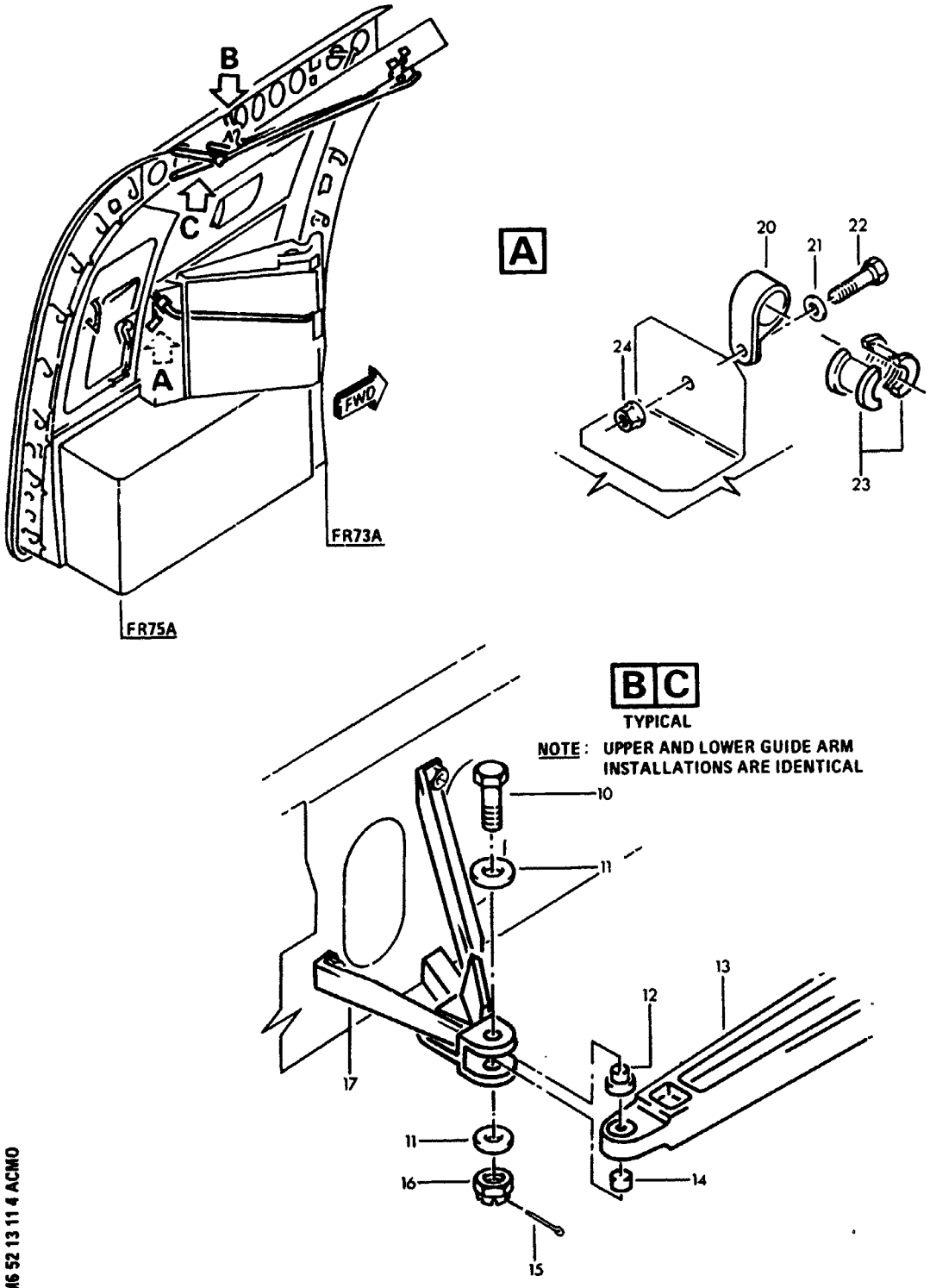


Sling Attachment
Figure 401

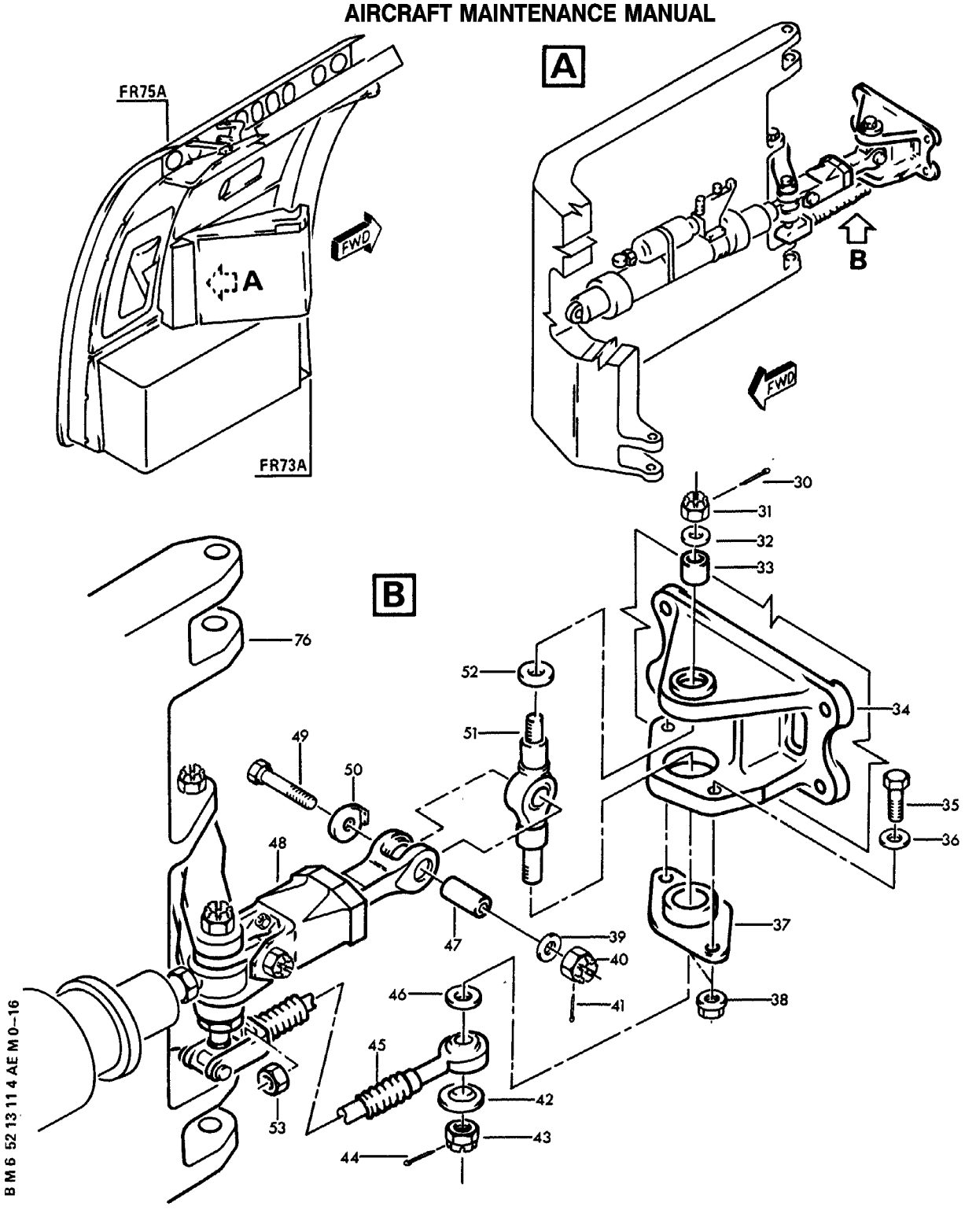
that support arm does not damage door attach fitting (34).

(5)Disconnect door damper and emergency operation cylinder spring detent linkage (Ref. Fig. 403).
(a)Remove cotter pin (44), nut (43), washer (42), spring unit (45) and washer (46) from gimbal (51).
(b)Remove cotter pin (41), nut (40), washer (39), bolt (49), lock-plate (50) and sleeve (47) and move telescopic unit (48) clear of gimbal (51).
(c)Remove nuts (38), bolts (35), washers (36), and gimbal flange (37).
(d)Remove cotter pin (30), nuts (31), washer (32), gimbal (51), bush (33) and washer (52).
(6)Disconnect support arm (76) from door (Ref. Fig. 404).
(a)Remove screws (75) and washers (74) and disconnect bonding straps (73).
(b)At upper and lower connection links (63, 77), remove cotter pins (60), nuts (61) and washers (62).
(c)At upper and lower connection links (63, 77), remove bolts (66), washers (65) and bushes (64).
(d)Move support arm (76) clear of door and remove washers (69, 70) at upper and lower connection links (63, 77).
(e)Remove sleeves (68), distance pieces (72) and washers (67, 71).
(f)Move support arm (76) clear of door and remove washers (69, 70) at upper and lower connection links (63, 77). Record location of washers (69, 70) for subsequent installation.
(g)Remove bushes (68), distance tubes (72) and washers (67, 71).
(h)Remove sling (1) from door.

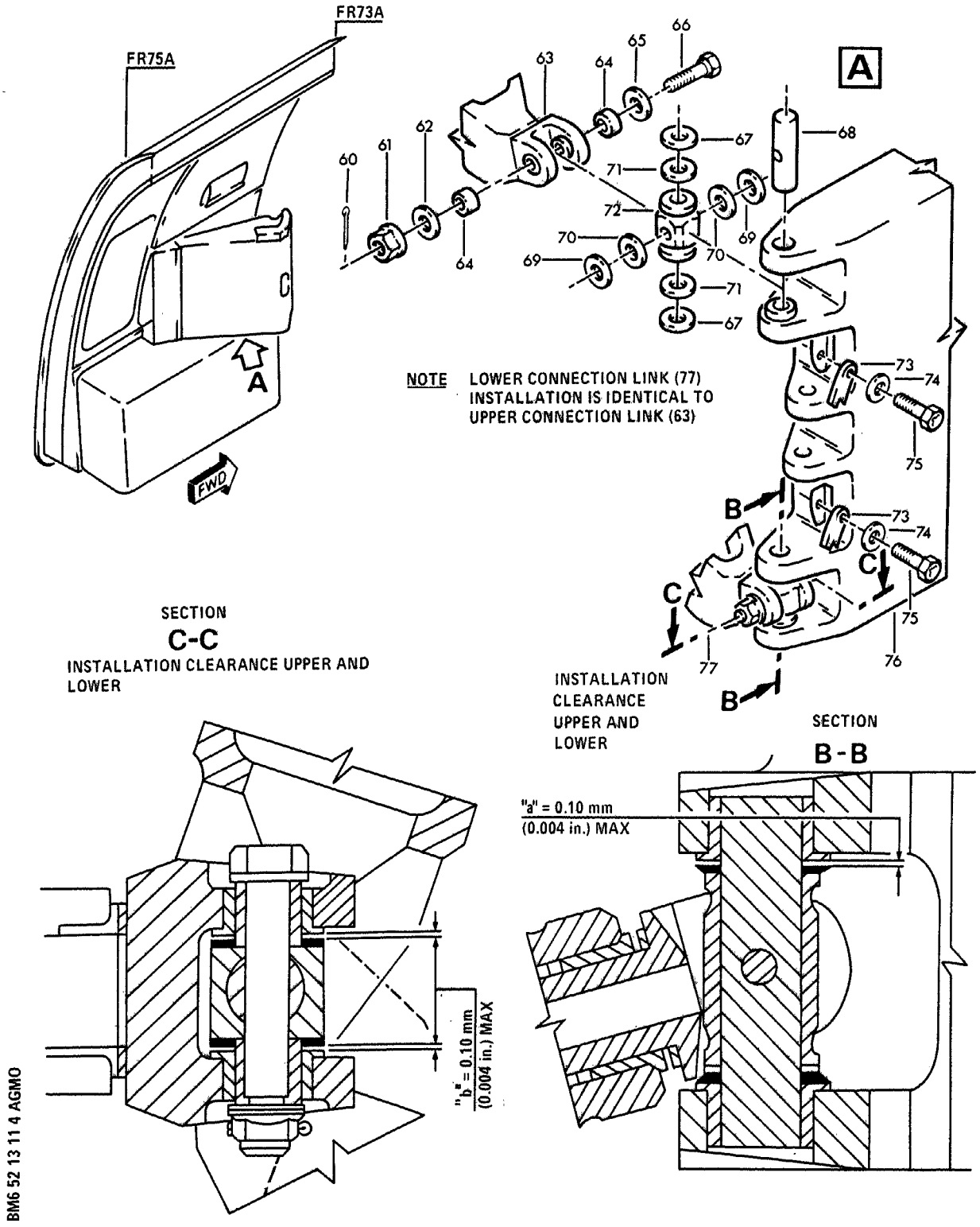
C. Preparation for Installation
(1)Clean all components, except components coated with polytetrafluoroethylene (PTFE), with cleaning agent (Mat. No. 11-004).
(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).
(3)Unless otherwise stated, lubricate all moving parts, except components coated with PTFE, with grease (Mat. No. 04-004).
(4)Make certain that drain holes in door structure are free from obstruction.



Upper and Lower Guide Arms
Figure 402



Door Damper and Emergency Operation Cylinder
Spring Detent Linkage
Figure 403



Door Attachment to Support Arm
Figure 404

D. Installation

(1)Install support arm on door (Ref. Fig. 404).

(a)Position support arm (76) on door.

(b)Install distance pieces (72), washers (67, 71) and sleeves (68) at support arm (76).

NOTE: Washers (71) are available in various thicknesses to enable the correct installation clearances to be obtained (Ref. Para. 2.D.(2)(g).

(c)Position support arm (76) on door and install washers (69, 70) at upper lower connection links (63, 77).

NOTE: Washers (70) are available in various thicknesses to enable the correct installation clearances to be obtained (Ref. Para. 2.D.(2)(g) - (l)).

(d)At upper and lower connection links (63, 77), install bushes (64), washers (62, 65), bolt (66) and nut (61).

(2)Install door (Ref. Fig. 404).

(a)Attach passenger door sling (1) P/N 98A52108004000 to crane, position crane and attach sling to hoisting lugs (2) (Ref. Fig. 401).

(b)Lift door and bring into installation position.

(c)Pull out door exterior control handle to fully open position.

(d)Connect support arm (76) to fuselage door frame (Ref. 52-13-12, P. Block 401).

(e)Install ballast weight PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.

(f)Lower door until weight is taken on support arm (76).

(g)Check that clearance 'a', between distance piece (72) and support arm (76), is 0.1 mm (0.004in.) max. Should clearance 'a' exceed stated limit, remove door and install with washers (71) of different thicknesses until correct clearance is obtained.

(h)Check that clearance 'b', between distance piece (72) and bushes (64), is 0.1 mm (0.004 in.) max.

(j)Close, but do not lock door.

(k)Check that vertical gaps, between door and fuselage, are between 3.5 and 6.5 mm (0.14 and 0.26 in.) and parallel, and that lifting shaft rollers engage correctly in roller fittings on fuselage door frames (Ref. 52-10-12, P. Block 501).

(l)Should clearance 'b' and vertical gaps exceed stated limits, remove door and install with washers (70) of different thicknesses until correct clearance and gaps are obtained.

(m)TORQUE nuts (61) to between 0.59 and 0.69 m.daN (52.2 and 61.1 lbf.in.) and safety with cotter pins (60).

(n)Position bonding straps (73) and install screws (75) with washers (74). For electrical bonding refer to 20-28-11, P. Block 1.

(p)Remove sling (1) from door.

(3)Install door damper and emergency operation cylinder spring detent linkage (Ref. Fig. 403).
(a)Clean contact surfaces of door attach fitting (34) and gimbal flange (37), screws (35) and washers (36) and coat with corrosion-preventive paste (Mat. No. 05-002).
(b)Install gimbal (51), washer (52), bush (33), washer (32) and nut (31).
(c)Install gimbal flange (37), washers (36), bolts (35) and nuts (38).
(d)Position telescopic unit (48) and install sleeve (47), lockplate (50), bolt (49), washer (39) and nut (40).
(e)Install washer (46), position spring unit (45), and install washer (42) and nut (43).
(f)TORQUE nuts (40, 43) to between 0.29 and 0.34 m.daN (25.7 and 30.1 lbf.in.) and safety with cotter pins (41, 44).
(g)TORQUE nut (31) to between 0.54 and 0.59 m.daN (47.8 and 52.2 lbf.in.) and safety with cotter pin (30).
(h)Remove nut (53) from spring unit (45).
(4)Install electrical harness 1704VB (1702VB) (Ref. Fig. 402).
(a)Install electrical harness 1704VB (1702VB) with sleeve halves (23), clip (20), washer (21), screw (22) and nut (24).
(b)Connect electrical harness 1704VB (1702VB) to terminal block 6002VT (6001VT).
(5)Install upper and lower guide arms (Ref. Fig. 402).
(a)Clean bushes (12, 14), apply corrosion-preventive paste (Mat. No. 05-002) and install in hinge fittings (17).
(b)Position guide arms (13), washers (11), install bolts (10), nuts (16) and safety with cotter pins (15).
(c)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

E. Test
(1)Carry out adjustment/test of the following:
(a)Door suspension (Ref. 52-10-12, P. Block 501).
(b)AFT passenger/crew door (Ref. 52-10-11, P. Block 501).
(c)Door locking mechanism (Ref. 52-10-20, P. Block 501).
(d)Door damper and emergency operation cylinder (Ref. 52-10-14, P. Block 501).
(e)Emergency escape slide release mechanism (Ref. 52-10-30, P. Block 501).
(f)Door warning switches (Ref. 52-71-11, P. Block 501).
(g)Limit switches (Ref. 52-73-13, P. Block 501).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

(h)Carry out operational test of residual pressure warning system for AFT passenger crew door (Ref. 52-73-00, P. Block 501).

**ON A/C ALL

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove hoisting lugs (2) and degrease with cleaning agent (Mat. No. 11-004) (Ref. Fig. 401).
(3)Apply corrosion-preventive paste (Mat. No. 05-002) to hoisting lugs and install in door, flush with skin.
(4)Install self-adhesive discs (3) (Mat. No. 05-052) over hoisting points (Ref. 11-20-00, P. Block 1).
(5)Install door insulation and lining (Ref. 52-10-13, P. Block 401).
(6)Remove ballast weight or support frame PN 98A52108008001 with the appropriate ballast weight.
(7)Install escape slide, if removed (Ref. 25-61-21, P. Block 401).
(8)Install slide raft, if removed (Ref. 25-61-22, P. Block 401).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(9)Arm emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(10)Remove all ground handling and maintenance equipment, standard and special tools, all access equipment and miscellaneous items.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

NOTE : The LH and RH door suspensions are identical in design and function but are opposite hand. Only the LH door suspension is described and illustrated.

1. Reason for the Job

A. Removal and installation of the following:

NOTE : Item No. correspond with operations in 3.B. and 3.D.

(1)Support arm
(2)Door buffer
(3)Door stay mechanism
(4)Upper and lower guide arm
(5)Guide arm hinge fitting

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.5 m (14.7 ft.)
B.	Crane (Max. door weight approx. 196 kg (432 lb.))
C. 98A52108004000	Hoisting Sling - Passenger/Crew Doors, LH and RH
R D. 98A52108007001	Tool Set - Removal/Installation Passenger/Crew Doors Socket Wrench (98A52108007017), Striker (98A52108007022) and Extractor (98A52108007750) are used only
E. 98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
or 98A52108008001	Support Frame - Ballast Weight, Doors NOTE : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
F.	Torque Wrench up to 0.6 m.daN (53.1 lbf.in.)
G.	Cotter Pins
H. Material No. 04-004	Common Greases (Ref. 20-31-00)
J. Material No. 05-002	Special Materials (Ref. 20-31-00)
K. Material No. 05-052	Special Materials (Ref. 20-31-00)
L. Material No. 09-013	Sealants (Ref. 20-31-00)
M. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
N. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 11-20-00, P. Block 1	Exterior Placards and Markings
- 20-28-11, P. Block 1	Electrical Bonding
- 25-23-41, P. Block 401	Door Frame Lining
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 51-76-10, P. Block 801	Repair of Sealing
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-12, P. Block 501	FWD, AFT Door Suspension
- 52-10-12, P. Block 601	FWD, AFT Door Suspension
- 52-10-13, P. Block 401	FWD and AFT Door Lining and Insulation
- 52-10-14, P. Block 401	FWD, AFT Door Damper and Emergency Operation Cylinder
- 52-13-11, P. Block 401	AFT Passenger/Crew Door
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

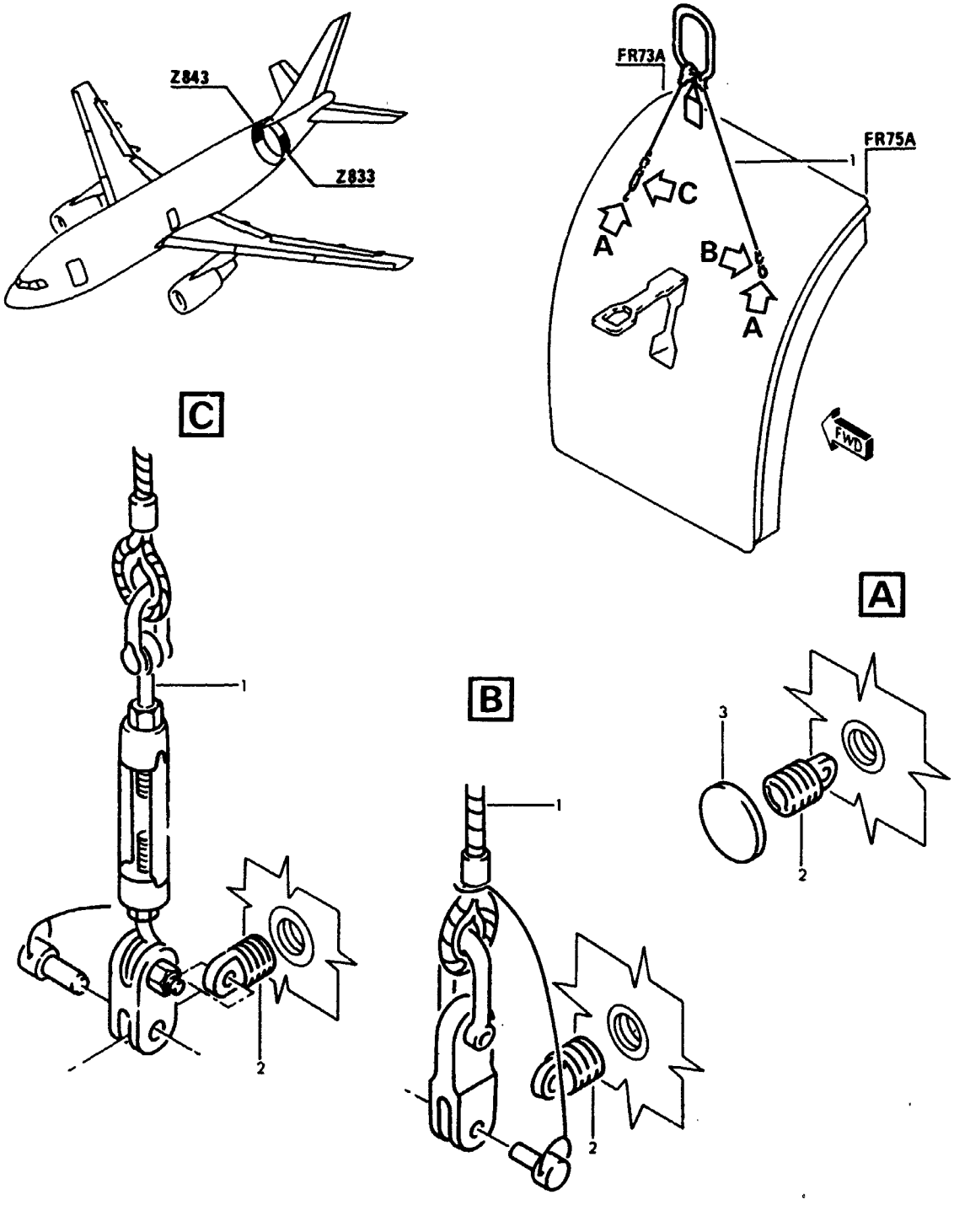
3. Procedure

A. Job Set-Up
(1)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(2)Safety emergency escape slide, emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(3)Remove escape slide, if installed (Ref. 25-61-21, P. Block 401).
(4)Remove slide raft, if installed (Ref. 25-61-22, P. Block 401).
(5)Remove door lining and insulation as required (Ref. 52-10-13, P. Block 401).
(6)Install ballast weight PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(7)Open door.
(8)Remove door frame linings as required (Ref. 25-23-41, P. Block 401).
(9)Install passenger door sling (1) P/N 98A52108004000 (Ref. Fig. 401).
NOTE : Steps (8) and (9) are necessary for removal/installation of support arm only.
(a)Remove self-adhesive discs (3) covering hoisting points.
(b)Remove hoisting lugs (2), and install in reverse position in door.
(c)Position crane and attach passenger door sling (1) P/N 98A52108004000 to door.
(10)Lift door sufficiently to remove load from support arm.

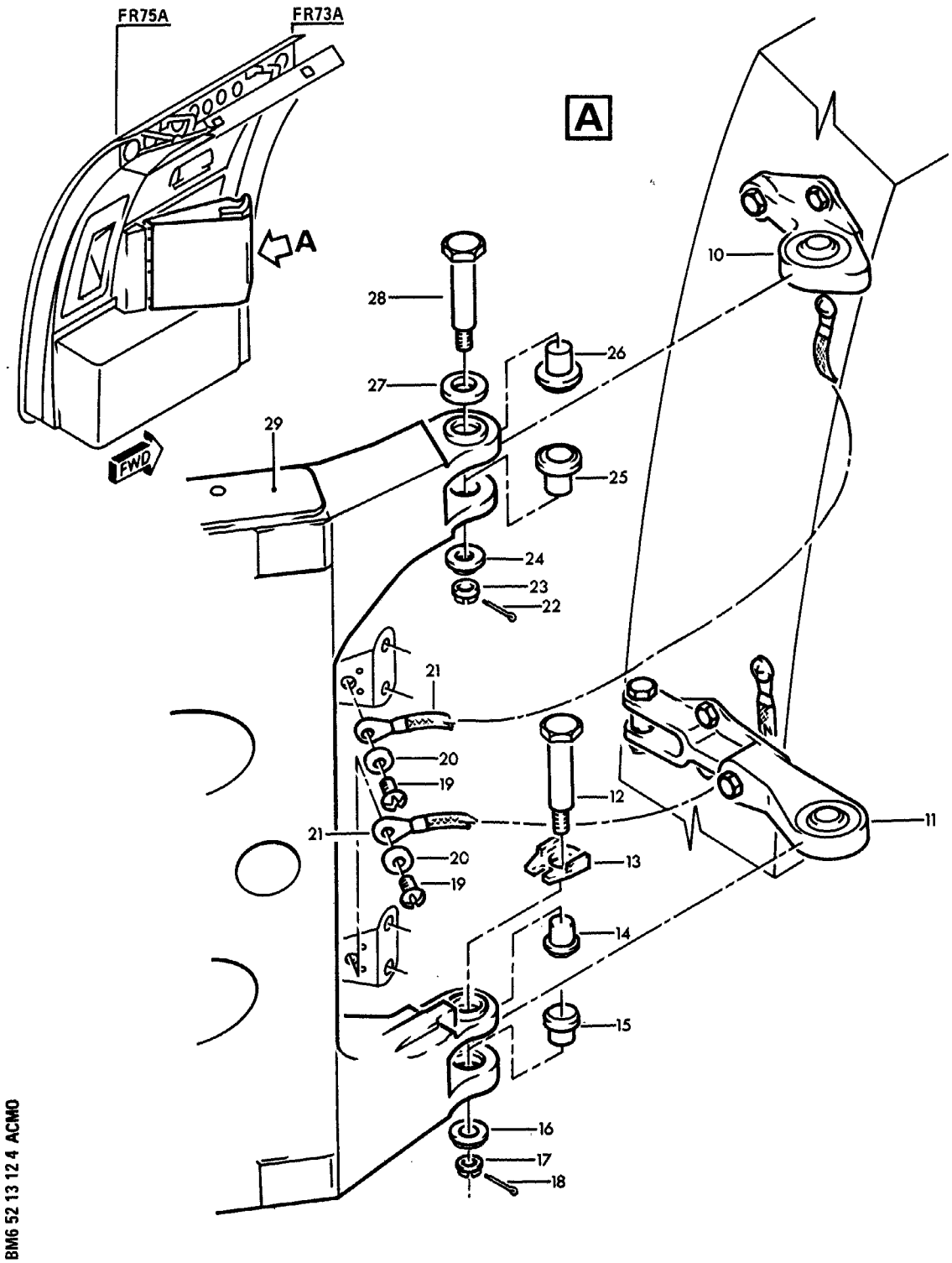
B. Removal
(1)Support Arm (Ref. Fig. 402).
(a)Disconnect door from support arm (Ref. 52-13-11, P. Block 401).
(b)Remove door damper and emergency operation cylinder (Ref. 52-10-14, P. Block 401).
(c)Disconnect bonding straps.
1 Remove screws (19), washers (20) and disconnect bonding straps (21) at support arm (29).
(d)Remove support arm (29).
1 At lower attach fitting (11), remove cotter pin (18), nut (17) and washer (16).
2 At upper attach fitting (10), remove cotter pin (22), nut (23) and washer (24).
3 Reposition support arm (29) to take load off bolts (12, 28).
4 At lower attach fitting (11), remove bolt (12) and locking plate (13).
5 At upper attach fitting (10), remove bolt (28) and washer (27).
6 Remove support arm (29) from attach fittings (10, 11) and remove bushes (14, 15, 25, 26).
(2)Door Buffer (Ref. Fig. 403).
(a)Remove nuts (41), bolts (46) and remove buffer assembly (40) from buffer support (42).
(b)Remove nuts (43), bolts (45), washers (44) and remove buffer support (42) from support arm.



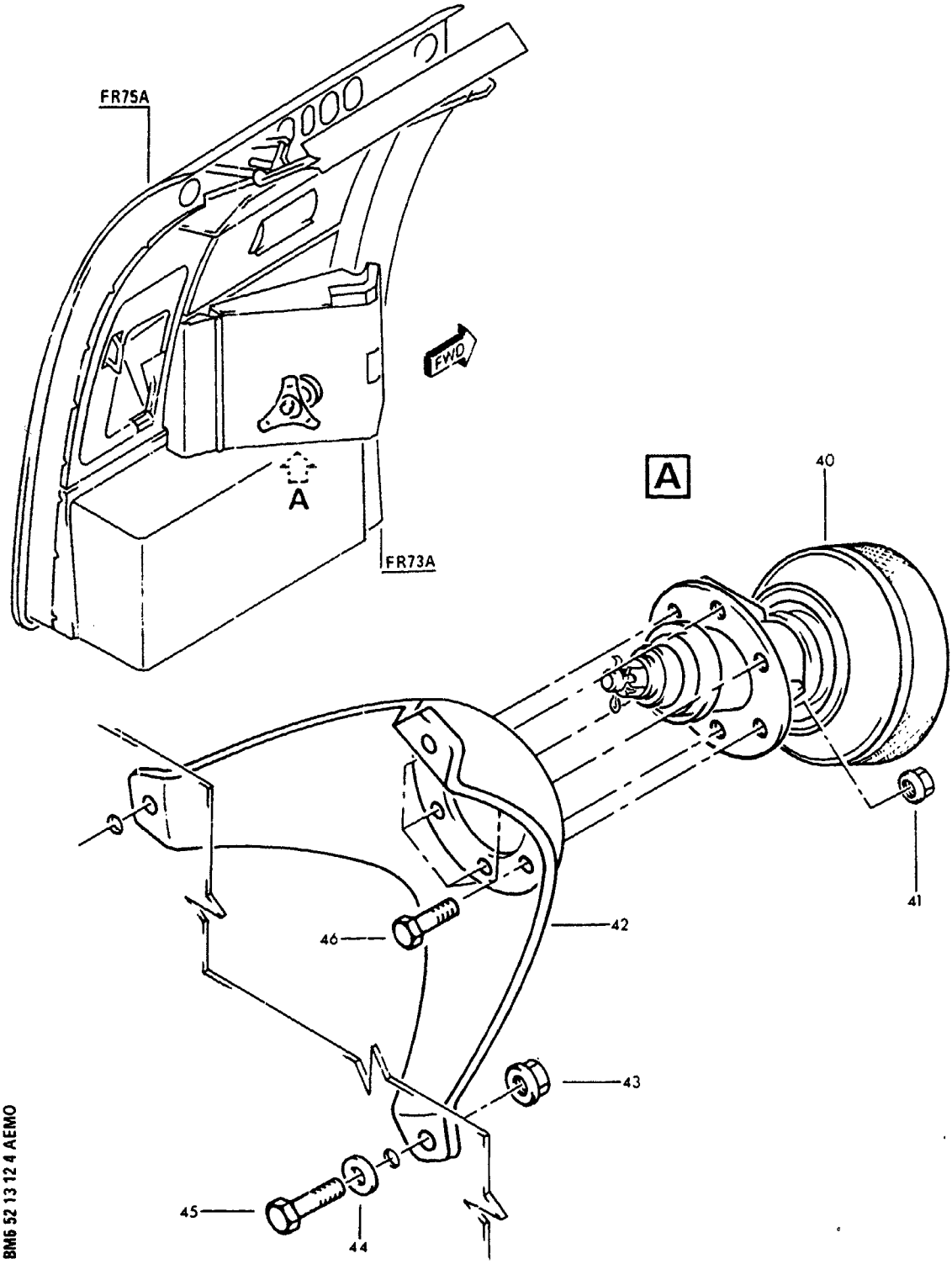
Sling Attachment
Figure 401

(3)Door Stay Mechanism (Ref. Fig. 404).
(a)Remove door stay mechanism from support arm (29).
1 Remove, nuts (61), bolts (60) and support arm grip (72).
2 Remove pushbutton rod assembly (71).
3 Remove cotter pins (62), nuts (63), washers (64) and locking unit (65).
(4)Upper and Lower Guide Arm (Ref. Fig. 405).
(a)Remove lower guide arm (84).
1 Remove cotter pin (89), nut (88), washers (90) and bolt (94).
2 Remove lockwashers (83) using socket wrench P/N 98A52108007017.
3 Remove nut (82), using extractor tool P/N 98A52108007750, and washer (81).
4 Remove guide arm (84) and bushes (85, 86) from guide arm hinge fitting (95).
(b)Remove upper guide arm (87) from guide arm fitting (96) and guide arm hinge fitting (91) as described in para. 3.B.(4)(a).
(5)Guide Arm Hinge Fitting (Ref. Fig. 405).
(a)Remove guide arm hinge fitting (91) or (95).
1 Remove cotter pin (89), nut (88), washers (90) and bolt (94).
2 Support lower guide arm (84) or upper guide arm (87) clear of guide arm hinge fitting (91) or (95) and remove bushes (85, 86).
3 Remove nuts (92) bolts (93) and hinge fitting (91) or (95).

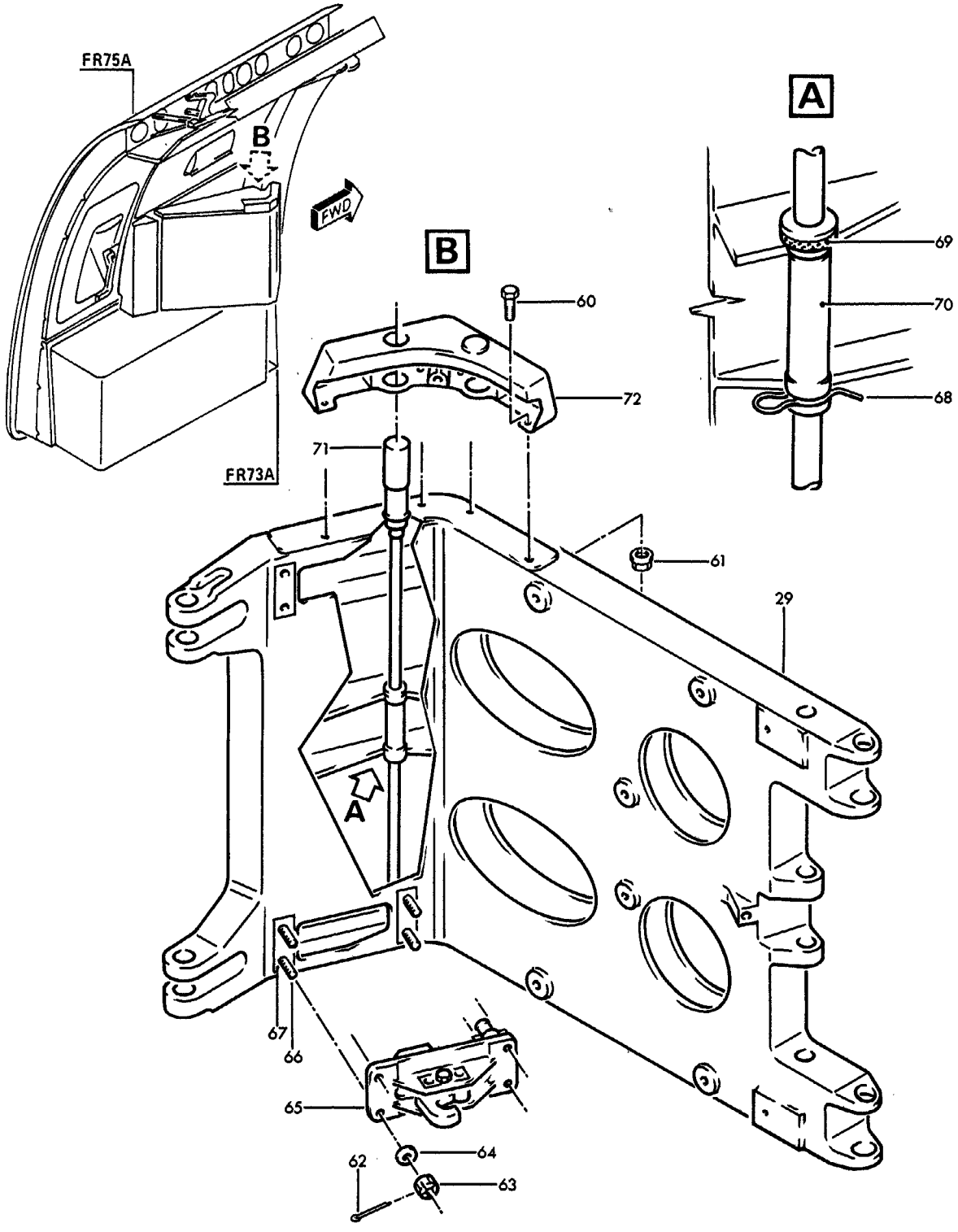
C. Preparation for Installation
(1)Clean all components, except components coated with polytetraflouro-ethylene (PTFE), with cleaning agent (Mat. No. 11-004).
(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).
(3)Unless otherwise stated, clean all bearings, bearing surfaces, washers, nuts, screws, bolts, bushes and sleeves and thinly coat with synthetic grease (Mat. No. 04-004).
(4)Check release shaft guide spacer (70) for satisfactory condition. If damaged replace spacer (70), washer (69) and spring clip (68) (Ref. Fig. 404).
(5)Check studs (66) and lockplates (67) for serviceability and tight fit.



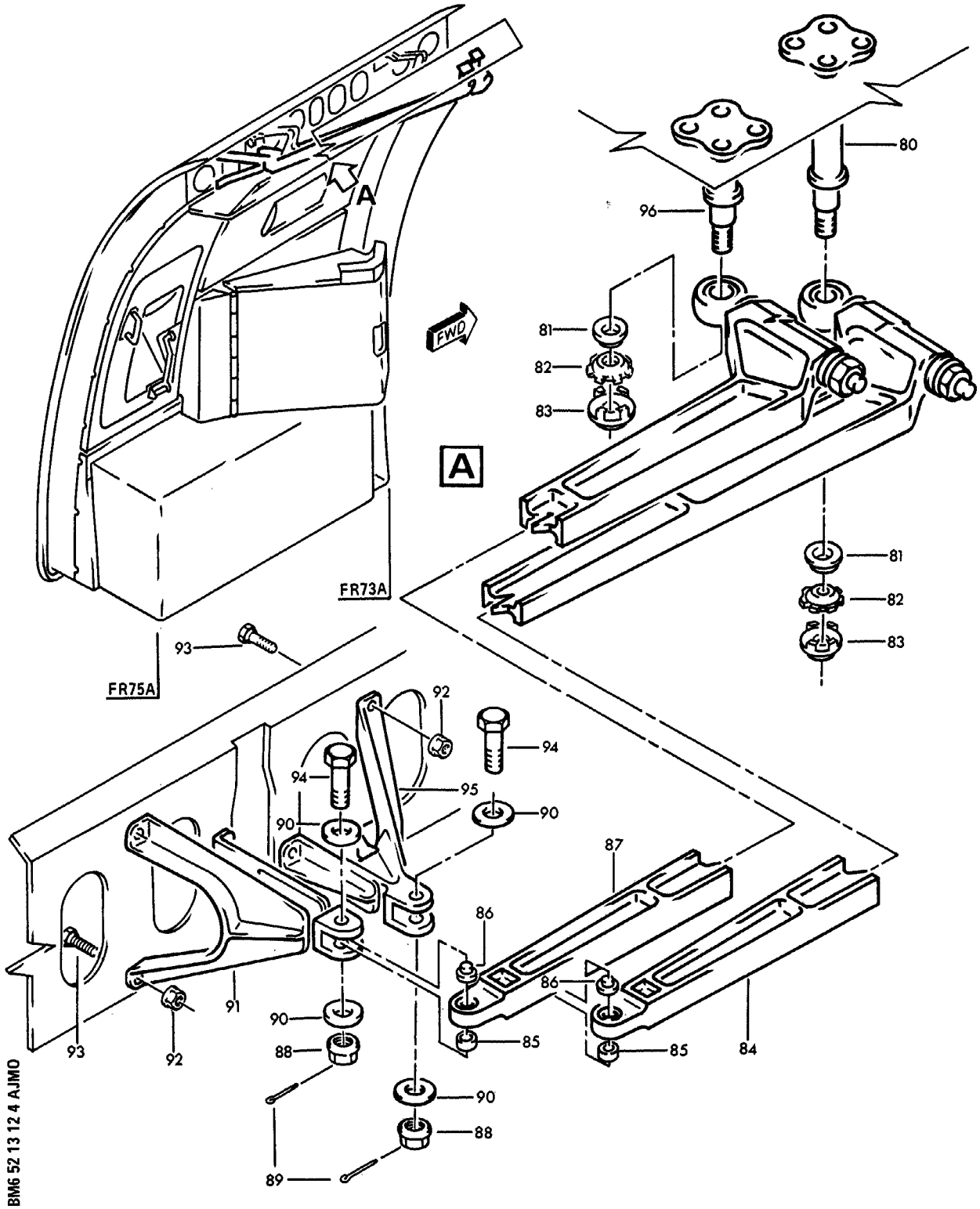
Support Arm
Figure 402



Door Buffer
Figure 403



Door Stay Mechanism
Figure 404



Upper and Lower Guide Arms and Hinge Fittings
Figure 405

D. Installation
(1)Support Arm (Ref. Fig. 402).
(a)Install support arm (29).
1 Install bushes (14, 15, 25, 26) in support arm (29).
2 Position support arm (29) on attach fittings (10, 11) and install locking plate (13), washer (27) and bolts (12, 28).
3 Install washers (16, 24) and nuts (17, 23), TORQUE nuts to between 0.54 and 0.59 m.daN (47.8 and 52.2 lbf.in.) and safety with cotter pins (18, 22).
(b)Connect bonding straps.
1 Position bonding straps (21) on support arm (29) and install screws (19) with washers (20). For electrical bonding refer to 20-28-11, P. Block 1.
(c)Install door damper and emergency operation cylinder (Ref. 52-10-14, P. Block 401).
(d)Connect door to support arm (Ref. 52-13-11, P. Block 401).
(e)Remove sling P/N 98A52108004000 from door.
(f)Carry out adjustment of support arm (Ref. 52-10-12, P. Block 501).
(g)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(2)Door Buffer (Ref. Fig. 403).
(a)Install buffer assembly (40) to buffer support (42).
1 Position buffer assembly (40) and install bolts (46) and nuts (41).
(b)Install buffer support (42) to support arm.
1 Position buffer support (42) and install bolts (45), with washers (44) and nuts (43).
(c)Carry out adjustment of door buffer (Ref. 52-10-11, P. Block 501).
(d)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(3)Door Stay Mechanism (Ref. Fig. 404).
(a)Position locking unit (65) on studs (66).
(b)Install washers (64) and nuts (63), TORQUE nuts to 0.35 m.daN (31.0 lbf.in.) and safety with cotter pins (62).
(c)Install pushbutton rod assembly (71).
(d)Install support arm grip (72) with bolts (60) and nuts (61).
(e)Check that door locks in fully open position.
(f)Push button of door stay mechanism and check door unlocking.
(g)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

(4)Upper and Lower Guide Arm (Ref. Fig. 405).
(a)Install upper guide arm (87).
1 Clean bushes (85, 86), apply corrosion-preventive paste (Mat. No. 05-002) and install in guide arm hinge fitting (91).
2 Position guide arm (87) on guide arm fitting (96), install washer (81) and nut (82).
3 Tighten nut (82) using socket wrench P/N 98A52108007017.
4 Install lockwasher (83) using striker P/N 98A52108007022.
5 Position guide arm (87) on guide arm hinge fitting (91), install bolt (94) with washers (90), nut (88) and safety with cotter pin (89).
(b)Install lower guide arm (84) on guide arm fitting (80) and guide arm hinge fitting (95) as described in para 3.D.(4)(a).
(c)Carry out adjustment of upper and lower guide arm (Ref. 52-10-12, P. Block 501).
(d)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(5)Guide Arm Hinge Fittings (Ref. Fig. 405).
(a)Install guide arm hinge fittings (91) or (95).
1 Clean contact surfaces of hinge fitting (91) or (95), door structure and bolts (93). Apply sealant (Mat. No. 09-013) to cleaned surfaces (Ref. 51-76-10, P. Block 801).
2 Position hinge fitting (91) or (95) and install bolts (93) and nuts (92).
3 Clean bushes (85, 86), apply corrosion-preventive paste (Mat. No. 05-002) and install in hinge fitting (91) or (95).
4 Position lower guide arm (84) or upper guide arm (87), install bolt (94), washers (90), nut (88) and safety with cotter pin (89).
(b)Carry out adjustment of upper and lower guide arm (Ref. 52-10-12, P. Block 501).
(c)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

E. Test
NOTE : Steps (1) thru (4) do not apply to removal/installation of door buffer and door stay mechanism.
(1)Close and open door several times to check operation.
(2)Make certain that gaps between door and fuselage are correctly adjusted (Ref. 52-10-12, P. Block 601).
(3)Carry out operational test of door warning switches for AFT passenger/crew door (Ref. 52-71-11, P. Block 501).
(4)Carry out operational test of escape slide visual warning (Ref. 52-73-13, P. Block 501).

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove hoisting lugs (2) and degrease with cleaning agent (Mat. No. 11-004) (Ref. Fig. 401).
(3)Apply corrosion-preventive paste (Material No. 05-002) to hoisting lugs and install in door, flush with skin.
(4)Install self-adhesive discs (3) (Material No. 05-052) over hoisting points (Ref. 11-20-00, P. Block 1).
(5)Remove ballast weight or support frame PN 98A52108008001 with the appropriate ballast weight.
(6)Install door frame linings where removed (Ref. 25-23-21, P. Block 401).
(7)Install door insulation and lining (Ref. 52-10-13, P. Block 401).
(8)Install escape slide, if removed (Ref. 25-61-21, P. Block 401).
(9)Install slide raft, if removed (Ref. 25-61-22, P. Block 401).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(10)Arm emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(11)Remove all ground handling and maintenance equipment, standard and special tools, all access equipment and miscellaneous items.

DOOR LOCKING MECHANISM - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS, (REF. 52-10-00, P. BLOCK 301).

CAUTION : TORSION BAR MUST BE UNLOADED AND DOOR SUPPORTED FOR REMOVAL AND INSTALLATION OF EXTERIOR CONTROL HANDLE, GEARBOX AND LOCKING HOOK, TWIN LEVER, LIFTING SHAFT, TORSION BAR SPRING AND TORQUE SHAFT, AND UPPER AND LOWER CONNECTION LINKS.

NOTE : The LH and RH door mechanisms are identical in design and function but are opposite hand. The LH door mechanism only is described and illustrated.

1. Reason for the Job

A. Removal and Installation of the following:

NOTE : Item No. correspond with operations in para. 3.B. and 3.D.

(1) Door Latches and Lining Hinge Arms
(2) Locking Shaft
(3) Lowering Shaft
(4) Interior Control Handle
(5) Interior Control Handle Latch Assembly
(6) Exterior Control Handle
(7) Gearbox and Locking Hook
(8) Twin Lever
(9) Lifting Shaft
(10) Torsion Bar Spring and Torque Shaft
(11) Upper Connection Link
(12) Lower Connection Link

2. Equipment and Materials

ITEM		DESIGNATION
A.		Access Platform, 4.5 m (14.7 ft.)
B.		Crane (Door Weight approx. 196 kg (432 lb.))
C.	98A52108004000	Hoisting Sling - Passenger/Crew Doors, LH and RH
D.	98A52108007000	Tool Set - Removal/Installation MID and AFT Passenger Crew Doors
	or 98A52108007001	Tool Set - Removal/Installation, AFT Passenger Crew Doors
E.	98A52108008000	Ballast Weight Assy - Slide and Slide Raft, Passenger/Crew Doors LH and RH
	or 98A52108008001	Support Frame - Ballast Weight, Doors
		NOTE : The support frame PN 98A52108008001 must be used with the appropriate ballast weight.
F.		Torque Wrench, up to 3.5 m.daN (25.82 lbf.ft.)
G.		Circlips
H.		Corrosion-Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
J.		Cotter Pins
K.		Lockwashers
L.		O-Ring
M.	Material No. 04-004	Common Greases (Ref. 20-31-00)
N.	Material No. 04-017	Common Greases (Ref. 20-31-00)
P.	Material No. 05-002	Special Materials (Ref. 20-31-00)
Q.	Material No. 05-027	Special Materials (Ref. 20-31-00)
R.	Material No. 05-052	Special Materials (Ref. 20-31-00)
S.	Material No. 09-013	Sealants (Ref. 20-31-00)
T.	Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
U.	Material No. 11-008	Cleaning Agents (Ref. 20-31-00)
V.	Material No. 16-001	Structure Paints (Ref. 20-31-00)
W.	Material No. 16-002	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 11-20-00, P. Block 1	Exterior Placards and Markings
- 20-28-11, P. Block 1	Electrical Bonding
- 25-23-41, P. Block 401	Door Frame Lining
- 25-61-21, P. Block 401	Dual Escape Slide
- 25-61-22, P. Block 401	Slide/Raft
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-11, P. Block 501	FWD, AFT Passenger/Crew Doors
- 52-10-12, P. Block 501	FWD, AFT Door Suspension
- 52-10-12, P. Block 601	FWD, AFT Door Suspension
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-20, P. Block 501	FWD, AFT Door Locking Mechanism
- 52-13-11, P. Block 401	AFT Passenger/Crew Door
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

3. Procedure

A. Job Set-Up
(1)Position access platform.

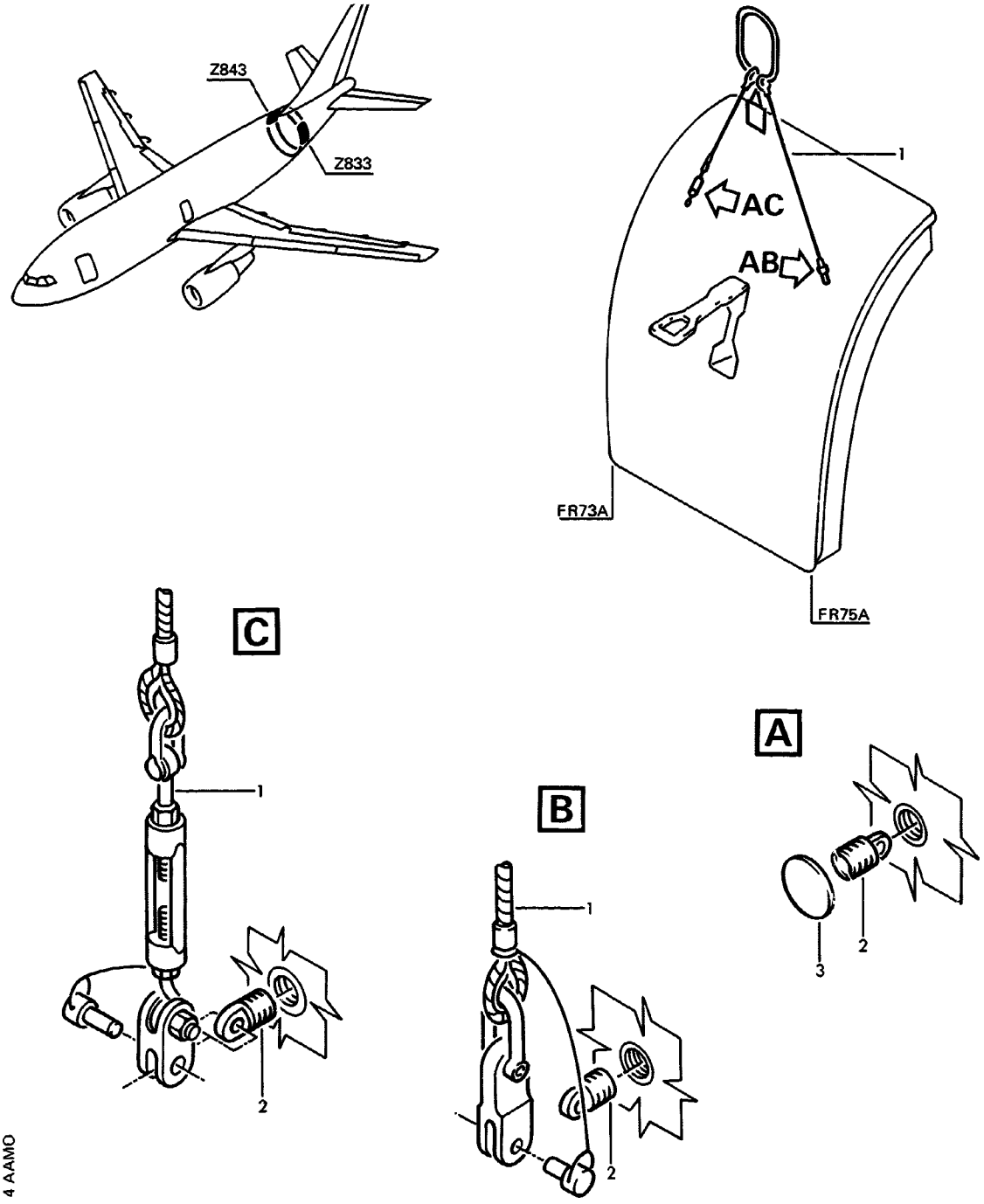
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(2)Safety emergency escape slide, emergency operation cylinder, and door warning system (Ref. 52-10-00, P. Block 301).
(3)Remove dual escape slide (Ref. 25-61-21, P. Block 401) or slide raft (Ref. 25-61-22, P. Block 401).
(4)Remove door lining and insulation as required (Ref. 52-10-13, P. Block 401).
(5)Install ballast weight PN 98A52108008000 or support frame PN 98A52108008001 with the appropriate ballast weight.
(6)Remove sidewall lining as required (Ref. 25-23-41, P. Block 401).
(7)Unload torsion bar (Ref. Fig. 402).

NOTE : The following steps are necessary for removal/installation of Exterior Control Handle, Gearbox and Locking Hook, Twin Lever, Lifting Shaft, Torsion Bar Spring and Torque Shaft, and Upper and and Lower Connection Links only.

(a)Install passenger door sling (1) P/N 98A52108004000 (Ref. Fig. 401).
1 Remove self-adhesive discs (3) covering hoisting points.
2 Remove hoisting lugs (2), and install in reverse position in door.
3 Position crane and attach passenger door sling (1) P/N 98A52108004000 to door.
(b)Lift door sufficiently to remove load from support arm.
(c)Cut and remove lockwire (11) and loosen tension bolt (10) until torsion bar is unloaded (Ref. Fig. 402).

NOTE : A torsion indicator placard is installed for different



Sling Attachment
Figure 401

loading of torsion bar.

(d)If torsion indicator placard is missing, renew it (Ref. 52-10-11, P. Block 501, Adjustment of Compensation Mechanism).

B. Removal

NOTE : For removal of door locking mechanism components use special tool set P/N 98A52108007000.

(1)Door Latches and Lining Hinge Arms (Ref. Fig. 403)

(a)Remove cotter pins (30), nuts (29), washers (24) and bolts (23). Move pushrods (28) clear of latches (25) and remove bushes (26, 27).

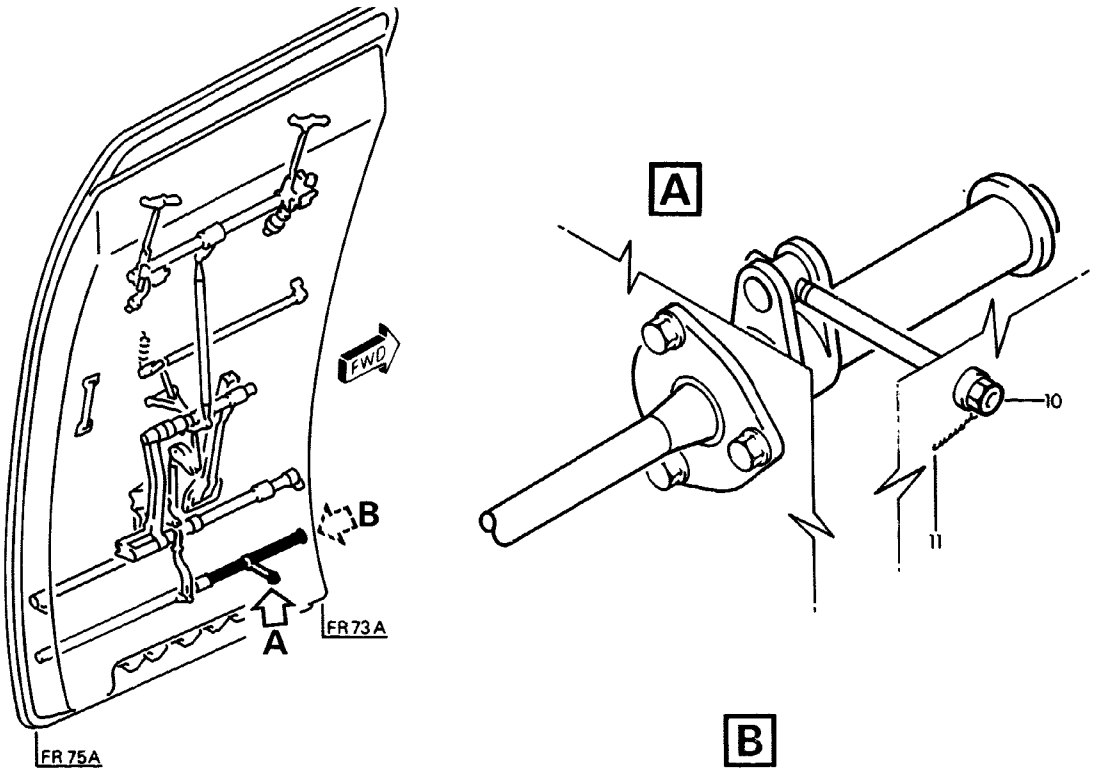
(b)Remove cotter pins (45), nuts (44), washers (42, 43), bolts (41) and move pushrods (40) clear of structure.

(c)Remove cotter pins (33), nuts (34), washers (35), bolts (36), lining hinge arms (39), and remove bushes (37, 38) from latches (25).

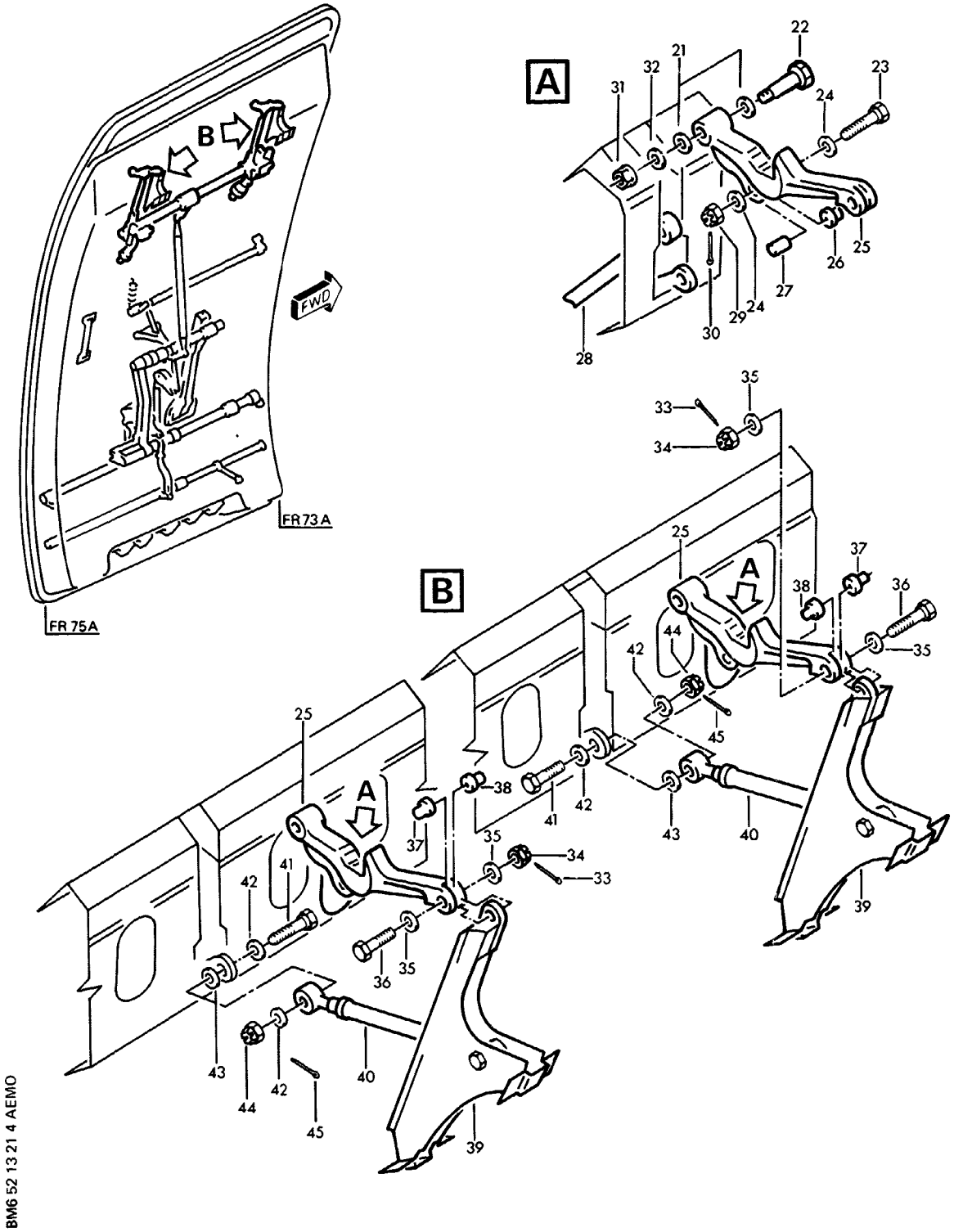
(d)Remove nuts (31), washers (32, 21), bolts (22) and latches (25).

(2)Locking Shaft (Ref. Fig. 404)
(a)Remove screws (92), washers (90) and locking indicator covers (91).
(b)Remove cotter pin (72), nut (70), washers (71) and bolt (76). Move pushrod (74) clear of lever (77) and remove bushes (73, 75) from lever.
(c)Remove cotter pins (83), nuts (84), washers (53) and bolts (54). Move pushrods (51) clear of bellcranks (66) and remove bushes (52, 85) from bellcranks.
(d)Turn locking shaft (82) until bellcrank (66) connections to spring-rod cylinders (67) are accessible.
(e)Remove cotter pins (69), nuts (68), washers (65), bolts (64) and move spring-rod cylinders (67) clear of bellcranks (66).
(f)Remove lockwashers (58) and nuts (59), using tool set P/N 98A52108007000.
(g)Remove levers (60).
(h)Turn locking shaft (82) until taper-pin nuts (62) are accessible.
(j)Remove cotter pins (61), nuts (62), and washers (63). Turn locking shaft (82) as required and remove taper-pins (81).
(k)Remove nuts (79), bolts (78) and release bearing flange (80).
(l)Remove nuts (55), bolts (57) and bearing flanges (56).
(m)Slide locking shaft (82) forward and remove aft bellcrank (66).
(n)Slide locking shaft (82) aft and remove forward bellcrank (66)
(p)Slide locking shaft (82) aft into hole in door structure, withdraw forward end from door and remove locking shaft forwards out of door.

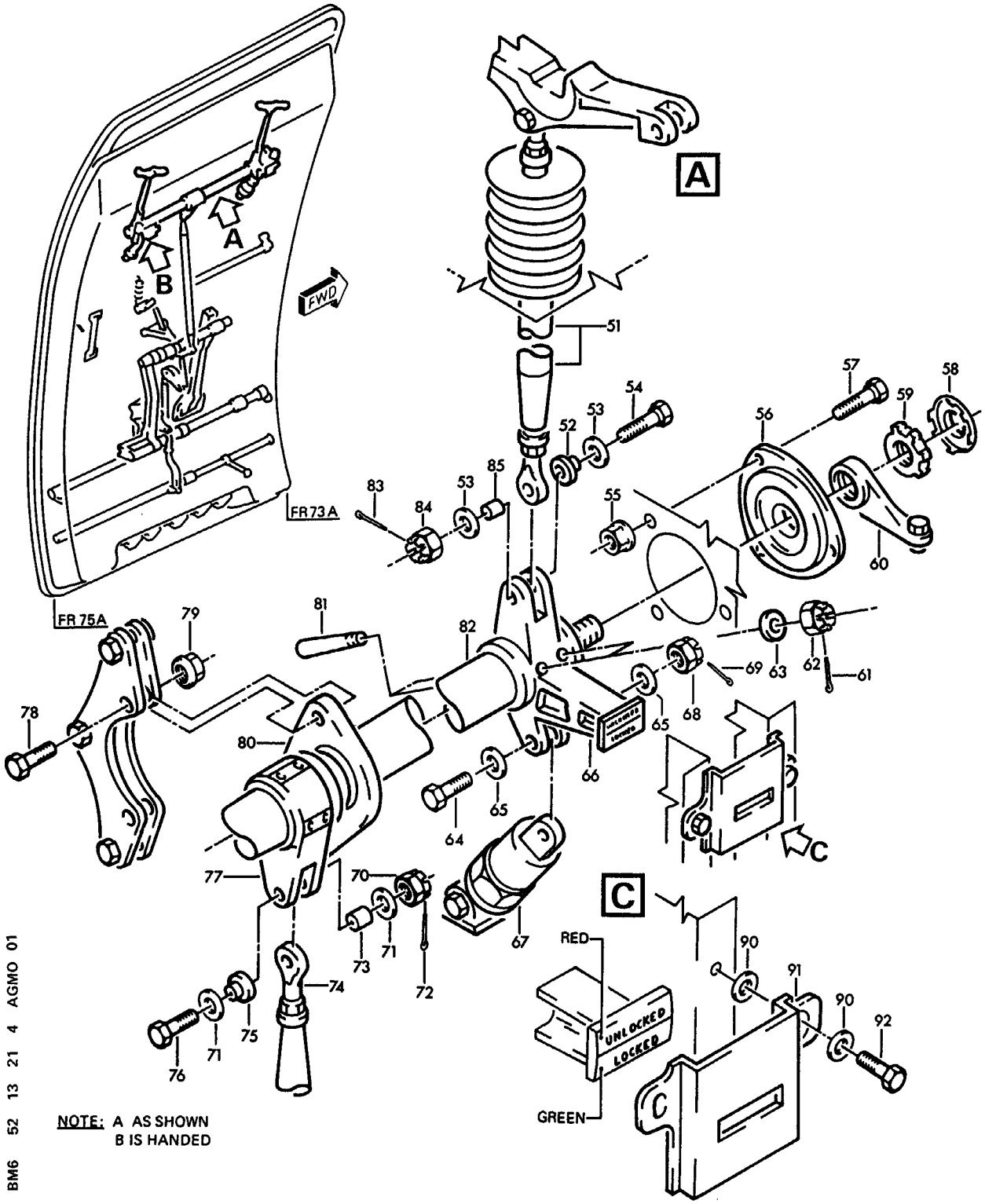
(3)Lowering Shaft (Ref. Fig. 405)
(a)Remove spring (103).
NOTE : Door must be open to release tension on spring.
1 Remove nut (101), and spring support (102).
(b)Disconnect pushrod (115).
NOTE : Door high position locking hook must be engaged with roller.
1 Remove cotter pin (121), nut (120), washers (118) and bolt (117). Move pushrod (115) clear of lever and remove bushes (116, 119).
(c)Remove lockwashers (108, 125) and nuts (107, 124), using tool set P/N 98A52108007000.
(d)Remove washers (106, 123).
(e)Mark position of lever (105) on lowering shaft (128) and remove lever (105).
(f)Remove nuts (126) and bolts (127).
(g)Press lowering shaft (128) forwards and remove bearing flange (122) and bearing (104).
(h)Remove lowering shaft (128).
(j)Remove roller assembly from lever of lowering shaft.
1 Remove cotter pin (113), nut (112), washer (111) and bolt (109).
2 Remove roller (110) and bush (114).



Torsion Indicator and Tension Bolt
Figure 402

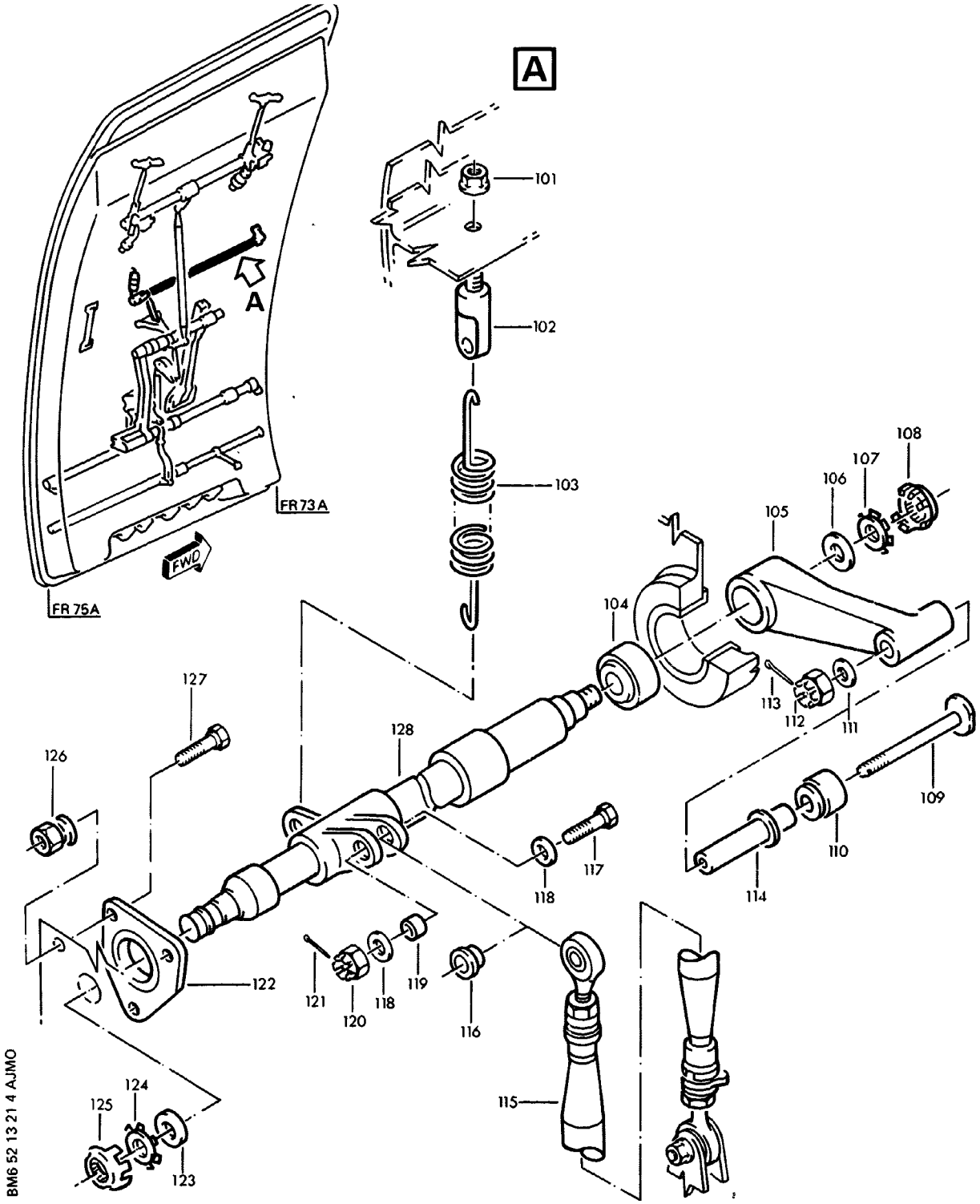


Door Latches and Lining Hinge Arms
Figure 403



Locking Shaft
Figure 404

R



Lowering Shaft
Figure 405

(4)Interior Control Handle (Ref. Fig. 406)
(a)Disengage handle (131) from latch assembly (143).
(b)Remove screw (135), washer (134) and disconnect bonding strap (133).
(c)Remove screw (136) and lockwasher (137).
(d)Mark position of handle (131) on gearbox splined shaft (132) and remove handle (131).
(5)Interior Control Handle Latch Assembly (Ref. Fig. 406)
(a)Disengage handle (131) from latch assembly (143) (Ref. para 3.B. (4)).
(b)Remove nuts (139), bolts (144), washers (145) and disconnect bonding strap (138).
(c)Remove nuts (140), bolts (142), washers (141) and remove latch assembly (143).
(6)Exterior Control Handle (Ref. Fig. 407)
CAUTION : MAKE CERTAIN DOOR IS SUPPORTED AND TORSION BAR UNLOADED.
(a)Remove screws (232), washers (231) and cover (230).
(b)Make certain handle (170) is in the open position.
(c)Remove nut (200), bolt (207), washer (206) and disconnect bonding strap (205).
(d)Remove nut (210), bolt (212) and washer (211).
(e)Remove nuts (213), bolts (209), washers (208) and disconnect bonding strap (214).
(f)Slide gearbox flange (204) aft.
(g)Remove cotter pin (171), nut (172) and washer (173).
CAUTION : DO NOT PULL GEARBOX SPLINED SHAFT TOO FAR INTO GEARBOX OTHERWISE GEARS WILL BE DISENGAGED.
(h)Pull gearbox splined shaft (174) through handle (170) using tool set P/N 98A52108007000 until handle (170) can be removed.
(j)Remove spacer (175) and spacer mount (176) and remove handle (170) from door.
(7)Gearbox and Locking Hook (Ref. Fig. 407)
CAUTION : MAKE CERTAIN DOOR IS SUPPORTED AND TORSION BAR UNLOADED.
(a)Remove interior control handle (131) (Ref. Para. 3.B. (4)).
(b)Remove exterior control handle (170) (Ref. Para. 3.B. (6)).
(c)Remove gearbox flange (204).
(d)Remove locking hook assembly (183).
1 Remove cotter pin (219), nut (218), washers (182) and bolt (181). Move pushrod (221) clear of locking hook assembly (183) and remove bushes (220, 180).
2 Remove cotter pin (201), nut (202), washer (203), locking hook assembly (183) and lockplate (184).

(e)Remove cotter pin (186), nut (187), washers (188) and bolt (192). Move pushrod (190) clear of lever (185) and remove bushes (189, 191) from lever.

(f)Remove cotter pin (193), nut (194), washers (195) and bolt (199). Move pushrod (197) clear of lever (185) and remove bushes (196, 198) from lever.

(g)Remove nuts (217), bolts (215) and washers (216).

(h)Remove gearbox (174) through opening of gearbox flange (204).

(8)Twin Lever (Ref. Fig. 408)

CAUTION : MAKE CERTAIN DOOR IS SUPPORTED AND TORSION BAR UNLOADED.

(a)Remove cotter pins (250), nuts (251), washers (258) and bolts (262). Move pushrods (259, 263) clear of twin lever (265) and remove bushes (260, 261).

(b)Remove cotter pin (257), nut (256), washers (255) and bolt (264).

(c)Remove twin lever (265) and washers (253) from door.

(d)Remove bushes (254) from door structure.

(e)Remove sleeve (252) from twin lever (265).

(9)Lifting Shaft (Ref. Fig. 409)

CAUTION : MAKE CERTAIN DOOR IS SUPPORTED AND TORSION BAR UNLOADED.

(a)Disconnect spring (284) and extendable rod (280) from lever (287).

1 Remove cotter pins (288), nuts (289), washers (286) and bolts (285). Move spring (284) and extendable rod (280) clear of lever (287) and remove bushes (282, 281, 283).

(b)Disconnect pushrods (299, 309) from lever (301).

1 Remove cotter pins (293), nuts (291), washers (292) and bolts (302). Move pushrods (299, 309) clear of lever (301) and remove bushes (298, 300).

(c)Disconnect pushrod (308) from lever (306).

1 Remove cotter pin (312), nut (311), washers (305) and bolt (304). Move pushrod (308) clear of lever (306) and remove bushes (307, 310).

(d)At both ends of lifting shaft, remove lockwashers (342) and nuts (341) using tool set P/N 98A52108007000.

(e)Mark positions of lifting arms (334) on ends of both lifting shaft halves (303, 321), loosen clamp bolts (330) and remove lifting arms (334).

(f)Disconnect universal joint between lifting shaft halves (303, 321).

1 Remove cotter pin (296), nut (295), washers (294), bolt (313), bushes (297) and pin (290).

2 Move lifting shaft half fork end (321) clear of lifting shaft half fork end (303) and remove swivel bearing block (314).

3 Make certain that bushes are retained in fork ends (303, 321).

(g)Remove lockwasher (320) and nut (319), using tool set P/N 98A52108007000.
(h)Remove nuts (318), bolts (315) and washers (316).
(j)Slide lifting shaft half (303) and bearing (340) aft through structure until fork end is clear of bearing flange (317) support structure.
(k)Remove bearing flange (317) and bearing (340) from lifting shaft half (303).
(l)Move fork end of lifting shaft half (303) inwards and then slide lifting shaft half (303) forwards to remove.
(m)Slide lifting shaft half (321) rearwards through bearing flange (317) support structure until clear of bearing (340) and then forwards to remove.
(n)Remove bearing (340).
(p)Remove roller assembly from levers of lifting shaft.
1 Remove cotter pin (331), nut (332), washer (333) and bolt (337).
2 Remove roller (336) and bush (335).

(10)Torsion Bar spring and Torque Shaft (Ref. Fig. 410)
CAUTION : MAKE CERTAIN DOOR IS SUPPORTED AND TORSION BAR UNLOADED.
(a)Remove tension bolt assembly.
1 Remove tension bolt (10) with spherical washer (369).
2 Remove pin (371) and bush (373).
(b)Disconnect pushrod (362).
1 Remove cotter pin (364), nut (363), washers (384) and bolt (383). Move pushrod (362) clear of lever (387) and remove washers (366) and bushes (365, 372).
2 Remove cotter pin (385), nut (386) and bolt (388).
(c)Loosen clamp (361) and remove split bushes (360).
(d)Remove circlips (367, 379) and covers (368, 378).
(e)Remove torsion bar spring (377) by sliding aft through torque shaft (382) and remove clamp (361).
(f)Remove lockwashers (381, 393) and nuts (380, 392), using tool set P/N 98A52108007000.
(g)Remove nuts (391) and bolts (389).
(h)Slide torque shaft (382) aft and remove bearing flange (390).
(j)Remove lever (387).
(k)Remove torque shaft (382) rearwards from door.
(l)Remove nuts (376), bolts (374) and flange assembly (375).
(m)Slide torsion shaft (370) aft, through opening in door structure, until forward end of torsion shaft is clear of door structure, and remove torsion shaft (370).

(11)Upper Connection Link (Ref. Fig. 411)

CAUTION : MAKE CERTAIN DOOR IS SUPPORTED AND TORSION BAR UNLOADED.

(a)Disconnect upper connection link (410) from support arm (Ref. 52-13-11, P. Block 401).

(b)Disconnect pushrod (411) from locking hook (418).

1 Remove cotter pin (416), nut (417), washers (415) and bolt (412).

2 Allow locking hook (418) to rest on gearbox and move pushrod (411) clear of locking hook (418).

3 Remove bushes (413, 414).

(c)Disconnect bonding straps.

1 Remove bolt (402), washer (401) and bonding straps (400, 403).

(d)Remove cotter pin (404), nut (405) and washer (406) from forward end of shaft (408).

(e)Remove cotter pin (419), nut (420) and washer (421) from aft end of shaft (408).

(f)Remove shaft (408) forwards through upper connection link (410) and door structure.

(g)Remove washers (407) and upper connection link (410) from door.

(h)Remove bush (422) from door.

(j)Remove washers (409) and sleeve (423) from upper connection link (410).

(12)Lower Connection Link (Ref. Fig. 412)

CAUTION : MAKE CERTAIN DOOR IS SUPPORTED AND TORSION BAR UNLOADED.

(a)Disconnect lower connection link (436) from support arm (Ref. 52-13-11, P. Block 401).

(b)Disconnect torsion bar pushrod (446).

1 Remove cotter pin (444), nut (445), washers (443) and bolt (449).

2 Move pushrod (446) clear of lower connection link (436).

3 Remove bushes (447, 448).

(c)Disconnect bonding strap.

1 Remove bolt (450), washer (451) and disconnect bonding strap (442).

(d)Remove cotter pin (430), nut (431) and washer (432) from forward end of shaft (434).

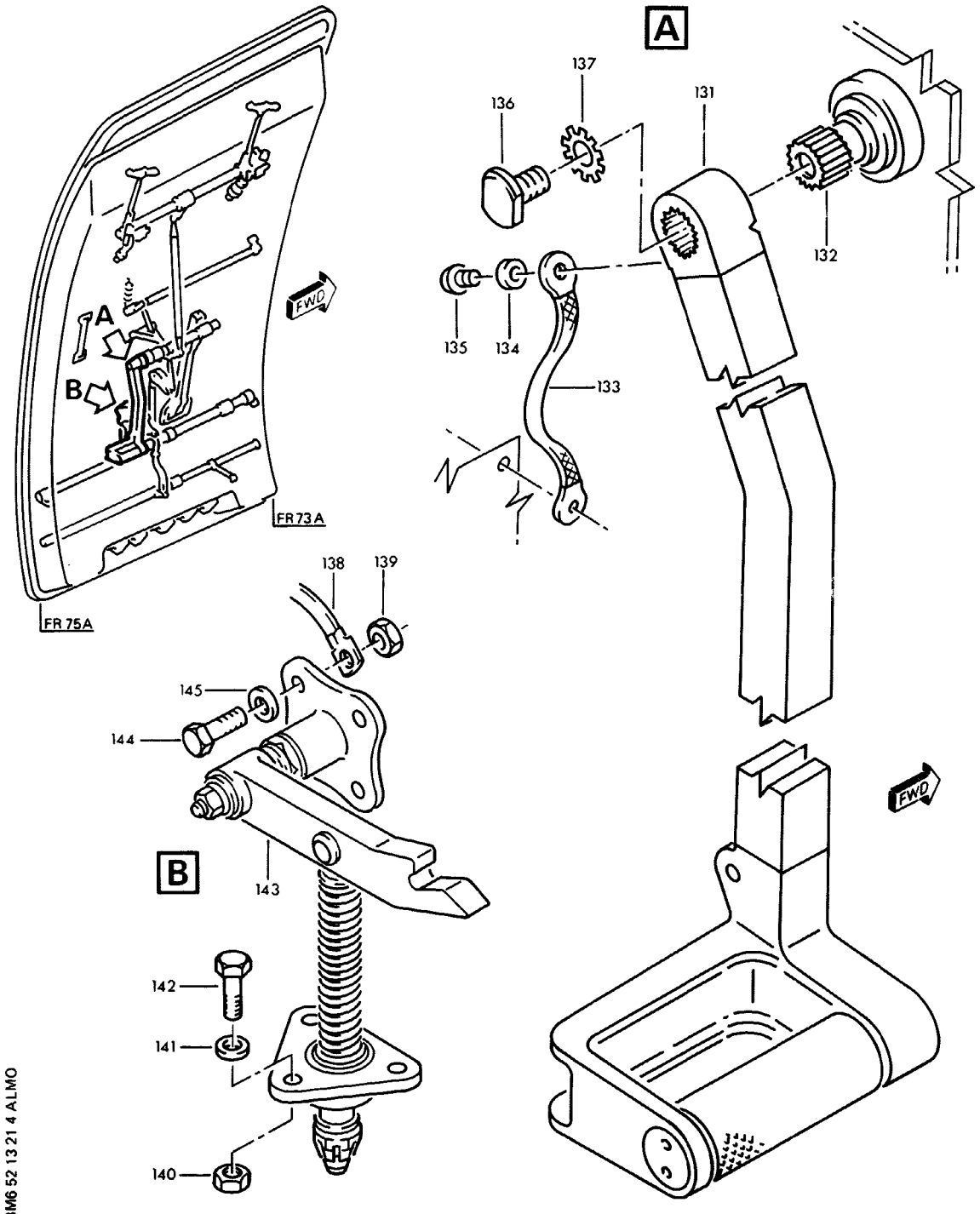
(e)Remove cotter pin (439), nut (438) and washer (437) from aft end of shaft (434).

(f)Remove shaft (434) from lower connection link (436) and door structure.

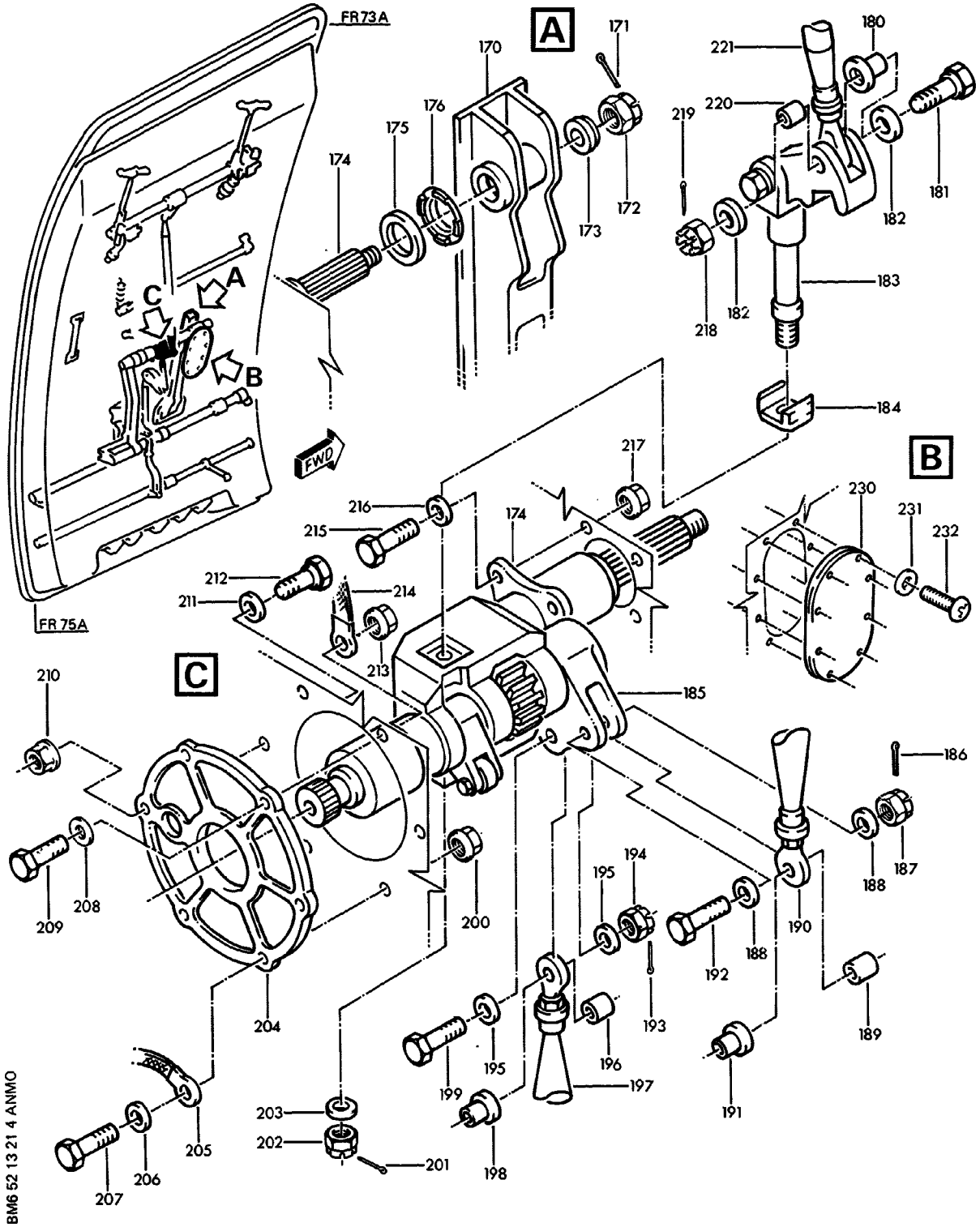
(g)Remove washers (433) and connection link (436) from door.

(h)Remove bush (440) from door.

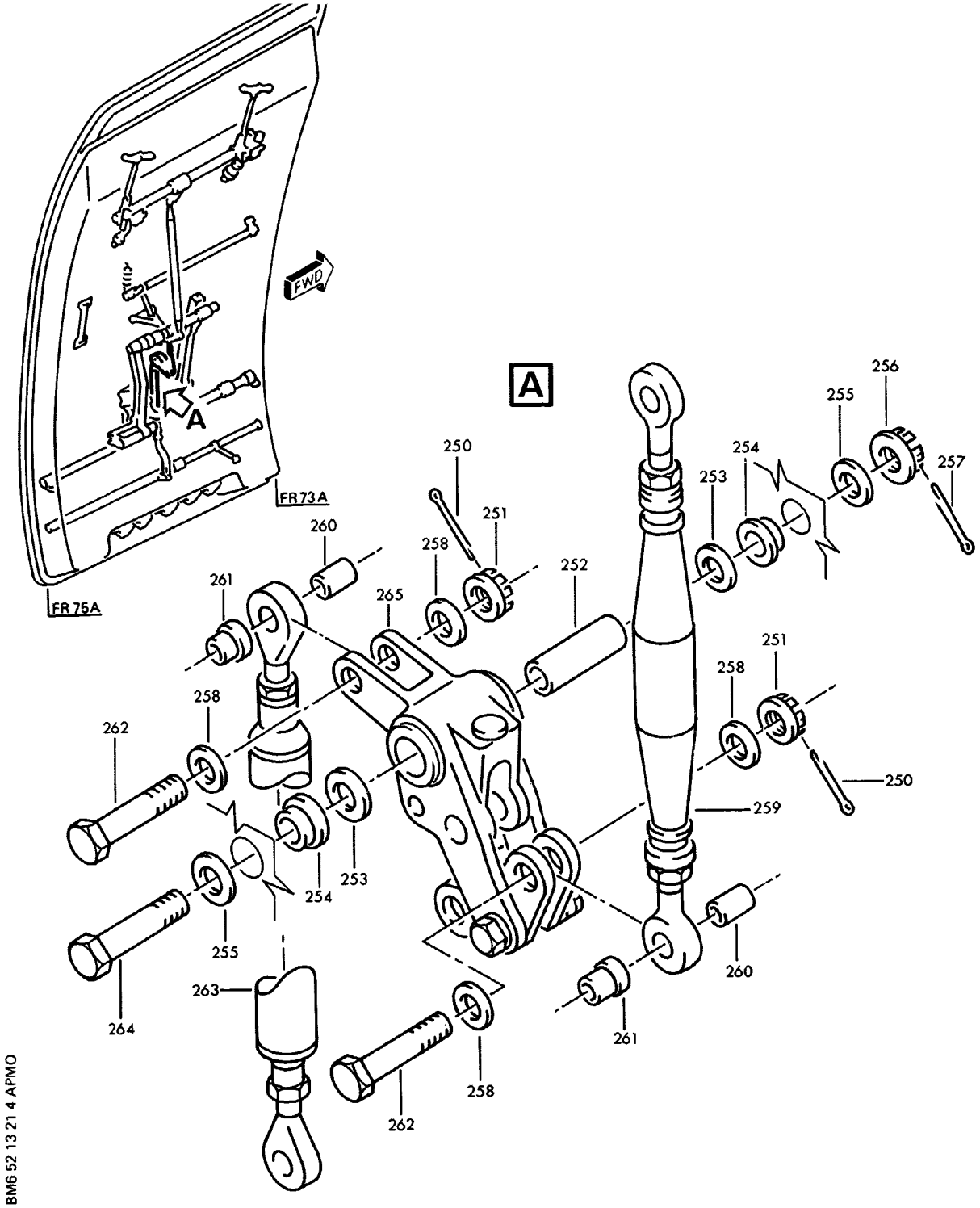
(j)Remove washers (435) and sleeve (441) from connection link (436).



Interior Control Handle and Latch Assembly
Figure 406

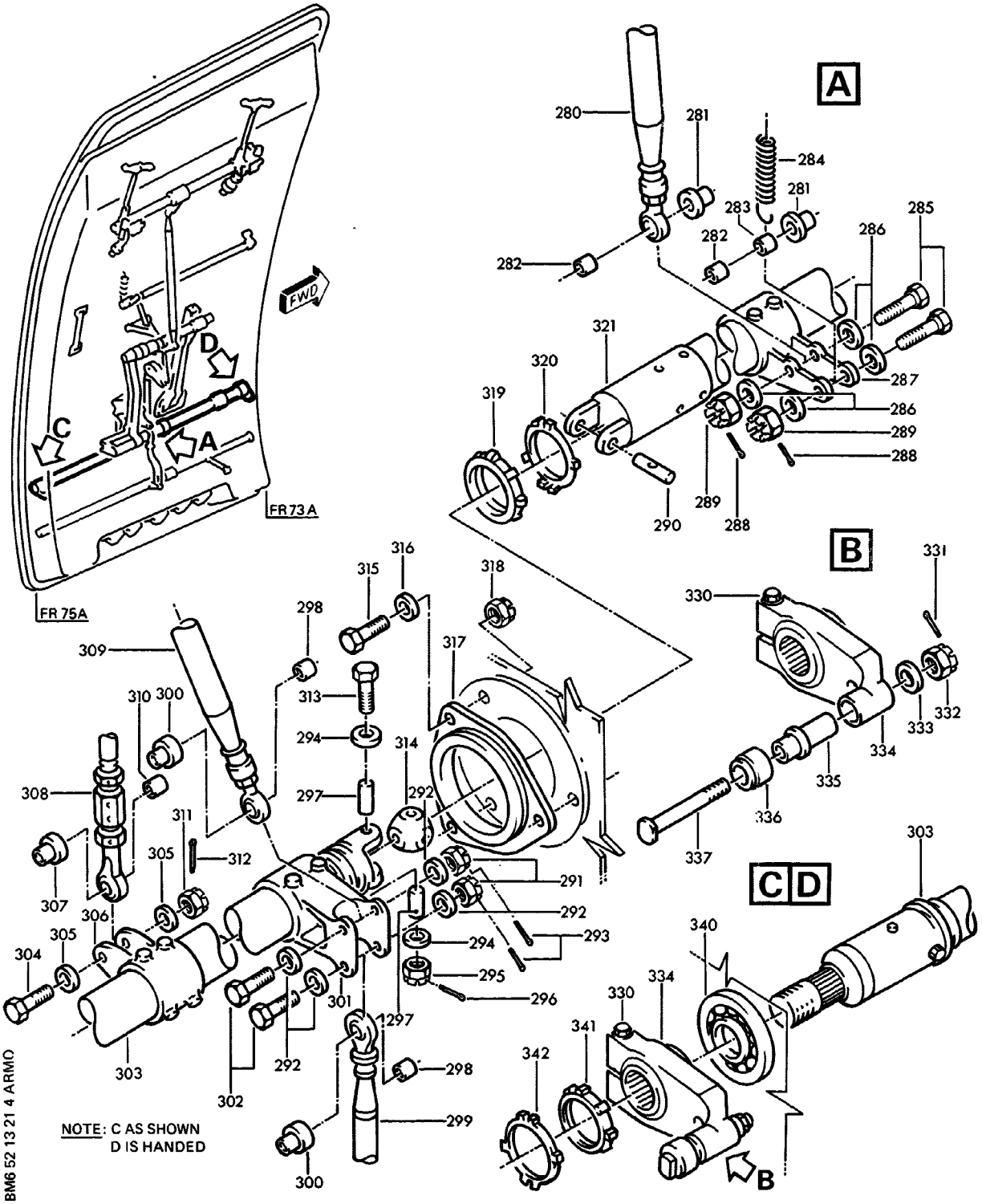


Exterior Control Handle, Gearbox and Locking Hook
Figure 407

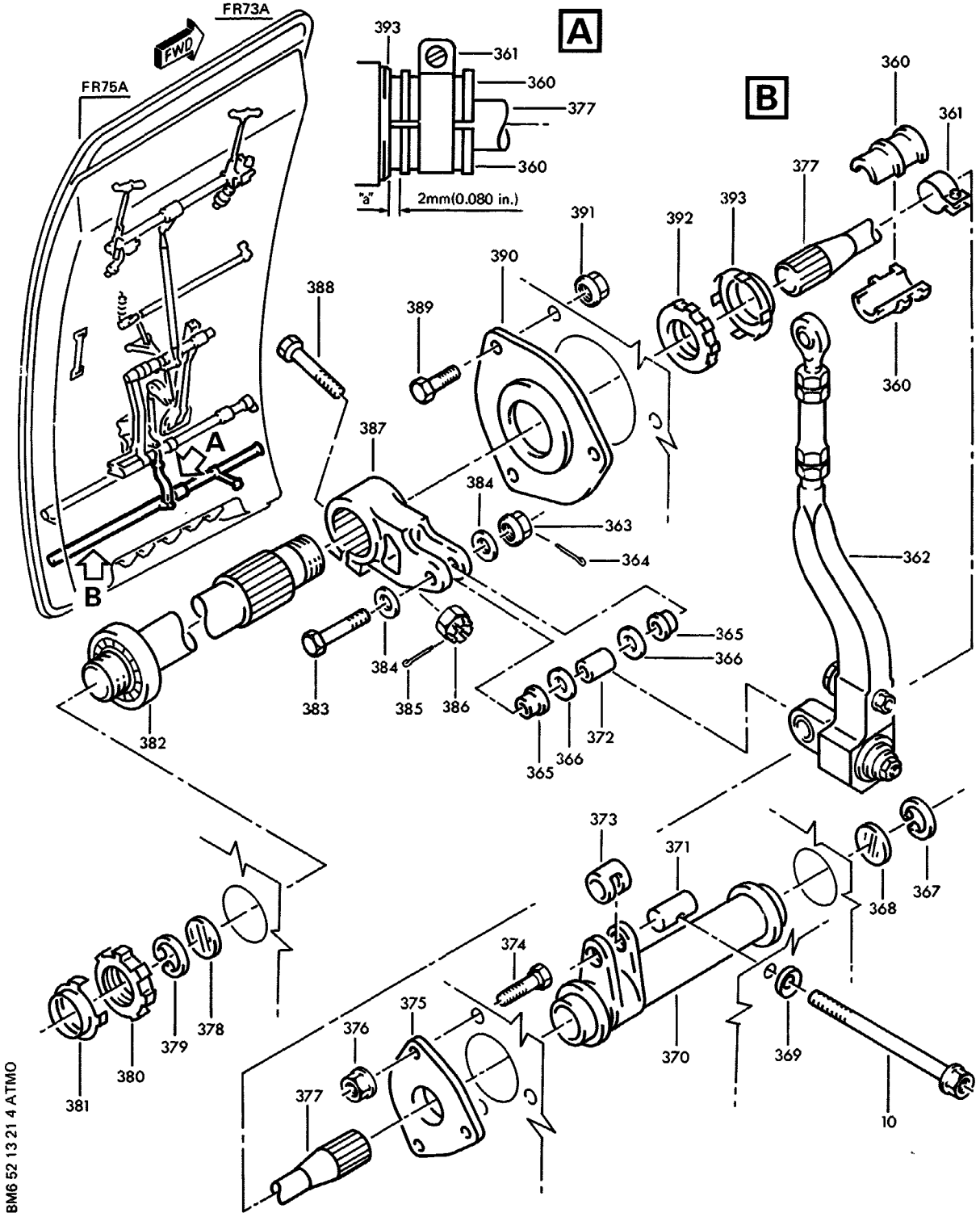


BM6 52 13 21 4 APMO

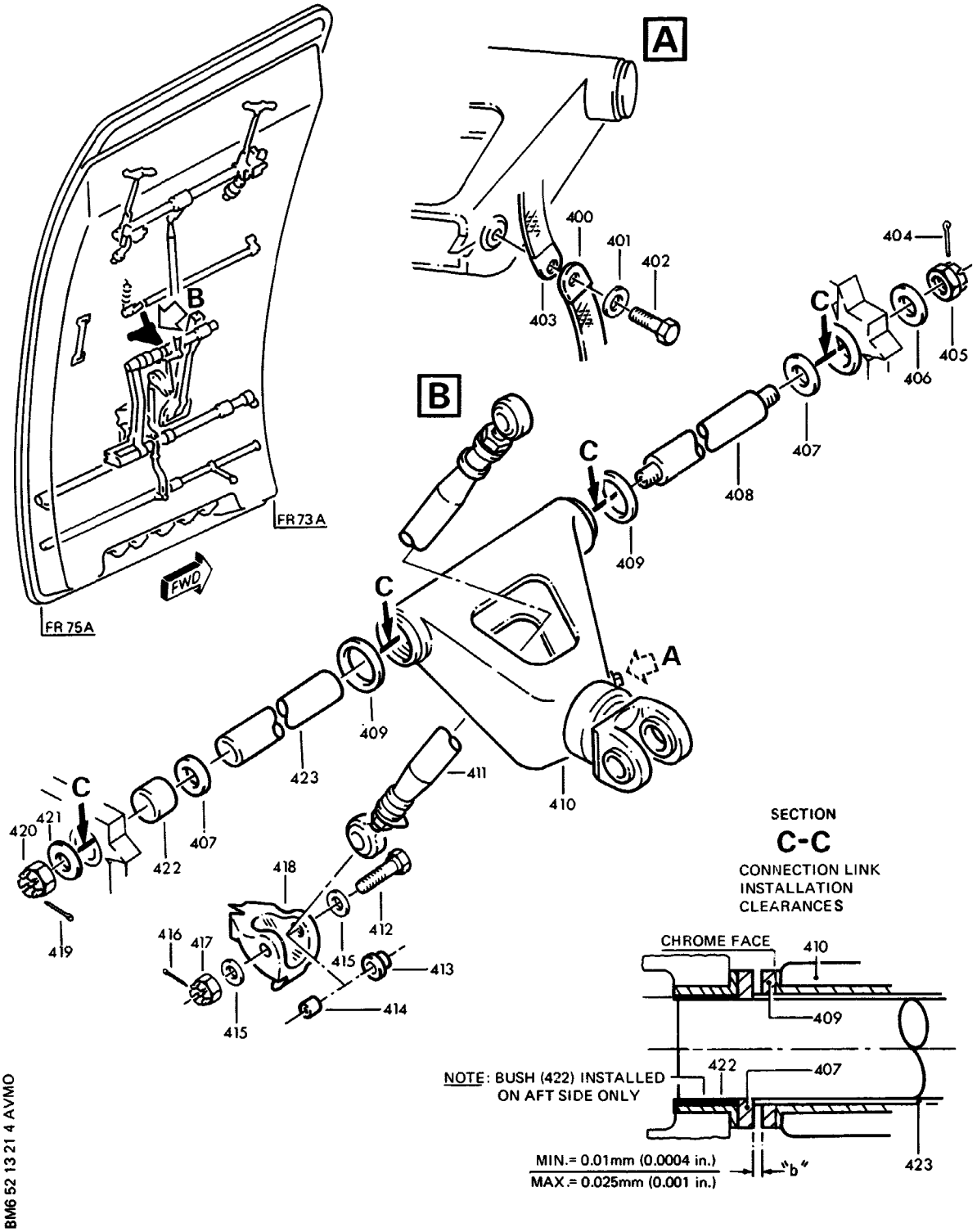
Twin Lever
Figure 408



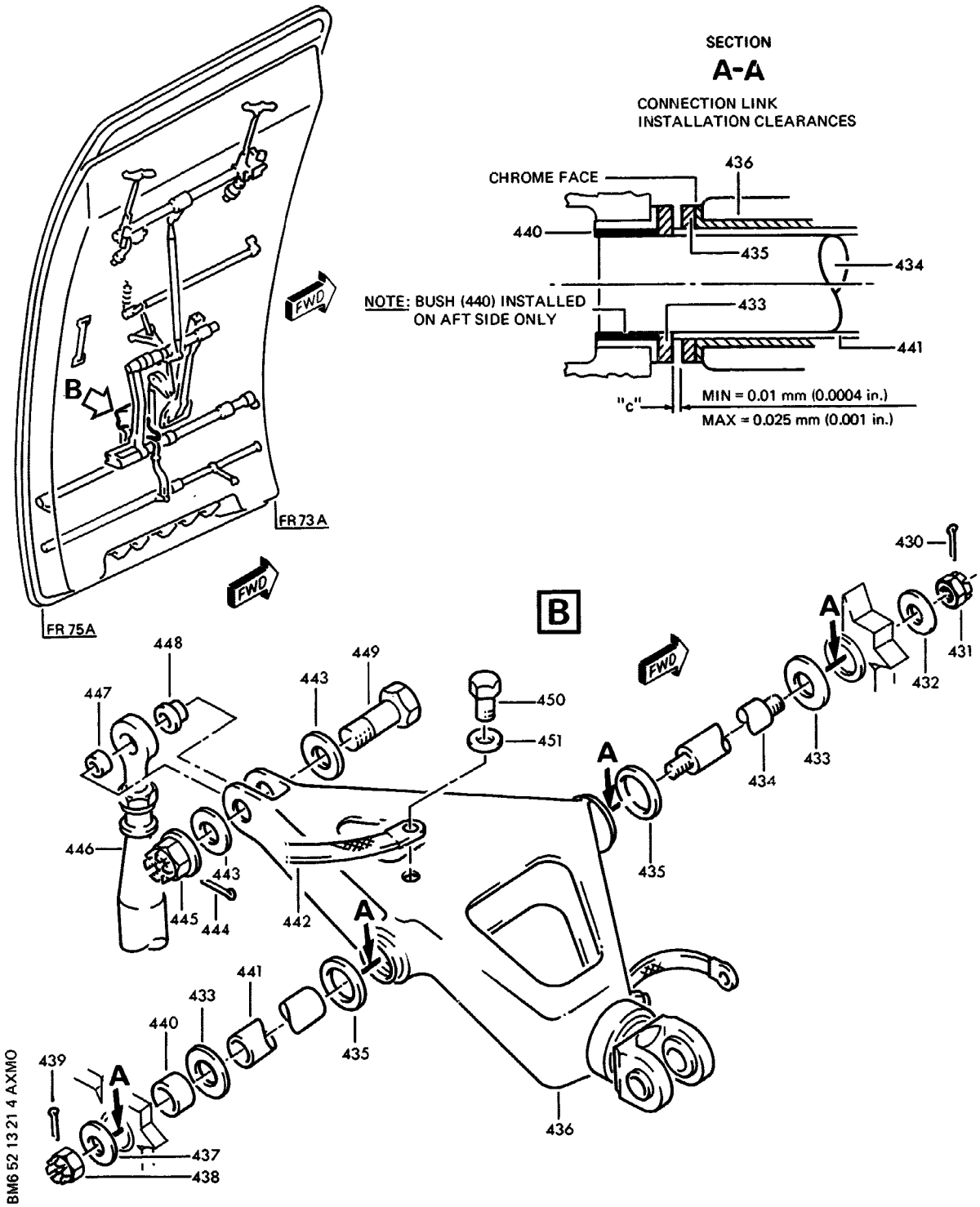
Lifting Shaft
Figure 409



Torsion Bar Spring and Torque Shaft
Figure 410



Upper Connection Link
Figure 411



Lower Connection Link
Figure 412

C. Preparation for Installation
(1)Clean all components, except components coated with polytetrafluoro-ethylene (PTFE) with cleaning agent (Mat. No. 11-004).
(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).
(3)Unless otherwise stated, lubricate all moving parts, except components coated with PTFE, with grease (Mat. No. 04-004).

D. Installation
NOTE : For installation of door locking mechanism components use special tool set P/N 98A52108007000.
(1)Door Latches and Lining Hinge Arms (Ref. Fig. 403)
(a)Position latches (25) with washers (21) and install bolts (22), washers (32) and nuts (31).
(b)Clean bushes (37, 38), apply corrosion-preventive paste (Mat. No. 05-002) and install in latches (25).
(c)Position lining hinge arms (39) and pushrods (40) and install bolts (41, 36), washers (35, 42, 43) and nuts (34, 44).
(d)TORQUE nuts (34) to between 0.20 and 0.24 m.daN (17.7 and 21.2 lbf.in.) and safety with cotter pins (33).
(e)TORQUE nuts (44) to between 0.29 and 0.34 m.daN (25.7 and 30.1 lbf.in.) and safety with cotter pins (45).
(f)Clean bushes (26, 27), apply corrosion-preventive paste (Mat. No. 05-002) and install in latches (25).
(g)Position latches (25) on pushrods (28), install bolts (23), washers (24) and nuts (29), and safety with cotter pins (30).
(h)Carry out adjustment/test of door latches (Ref. 52-10-11, P. Block 501).
(j)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(2)Locking Shaft (Ref. Fig. 404)
(a)Slide aft end of locking shaft (82) through opening of aft bellcrank (66) and into hole in door structure.
(b)Insert forward end of locking shaft (82) into door, position forward bellcrank (66) and slide locking shaft (82) forward through bellcrank.
(c)Position aft bellcrank (66) in door and slide locking shaft (82) through bellcrank.
(d)Position bearing flange (80) and install bolts (78) and nuts (79).
(e)Install bearing flanges (56) with bolts (57) and nuts (55).
(f)Position bellcranks (66) on locking shaft (82) and install taper-pins (81).
(g)Turn locking shaft (82) until threads of taper-pins (81) are accessible, install washers (63) and nuts (62), TORQUE nuts to between 0.2 and 0.25 m.daN (17.7 and 22.1 lbf.in.) and safety with cotter pins (61).

(h)Position spring-rod cylinders (67) on bellcranks (66), install bolts (64), washers (65) and nuts (68), safety with cotter pins (69).
(j)Clean bushes (52, 85) apply corrosion-preventive paste (Mat. No. 05-002) and install in bellcranks (66).
(k)Position pushrods (51) in bellcranks (66), install bolts (54), washers (53) and nuts (84), safety nuts with cotter pins (83).
(l)Install levers (60).
NOTE : Alignment marks on levers must be aligned with center punch marks on locking shaft ends.
(m)Install nuts (59), TORQUE to between 0.98 and 1.08 m. daN (86.7 and 95.6 lbf.in.) and safety with lockwashers (58) using tool set P/N 98A52108007000.
(n)Clean bushes (73, 75), apply corrosion-preventive paste (Mat. No. 05-002) and install in lever (77).
(p)Position pushrod (74) in lever (77), install bolt (76), washers (71) and nut (70), and safety with cotter pin (72).
(q)Apply corrosion-preventive paste (Mat. No. 05-002) to plain shank of screws (92).
(r)Position locking indicator covers (91) and install screws (92) and washers (90).
NOTE : Make certain that minimum clearance of 0.5 mm (0.02 in.) exists between locking indicator covers and bellcranks.
NOTE : If new bellcranks with different locking indicator placards on the locking indicator arms are installed, the locking indicator covers must be changed to a type compatible with the new placards.
(s)Check operation of door locking (Ref. 52-10-20, P. Block 501).
(t)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

(3)Lowering Shaft (Ref. Fig. 405)
(a)Install roller assembly to lever of lowering shaft.
1 Clean bush (114), apply sealant (Mat. No. 09-013) to lever contact surface and install in lever of lowering shaft.
2 Clean roller (110), apply grease (Mat. No. 04-004) and install to bush (114).
3 Install bolt (109), washer (111), nut (112), TORQUE nut to between 0.29 and 0.34 m.daN (25.7 and 30.1 lbf.in) and safety with cotter pin (113).
(b)Position bearing (104) and bearing flange (122) on lowering shaft (128).
(c)Position lowering shaft (128) in door and install bolts (127) and nuts (126).
(d)TORQUE nuts (126) to 0.36 m.daN (31.9 lbf.in.).
(e)Install lever (105) in original position as marked on lowering shaft (128).

(f)Install washers (106, 123) and nuts (107, 124), TORQUE nuts to between 0.98 and 1.08 m.daN (86.7 and 95.6 lbf.in.) and safety with lockwashers (108, 125) using tool set P/N 98A52108007000.
(g)Clean spring support (102), bushes (116, 119) and nut (101), and apply corrosion-preventive paste (Mat. No. 05-002).
(h)Install pushrod (115).
1 Install bushes (116, 119).
2 Position pushrod (115), install bolt (117), washers (118), nut (120), and safety with cotter pin (121).
(j)Install spring (103).
1 Install spring support (102) and nut (101).
2 Install spring (103) in spring support (102) and lowering shaft (128) lever.
(k)Seal bearing flange (122) with sealant (Mat. No. 09-013) (Ref. 51-76-10, P. Block 801).
(l)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(m)Check door closed position, door high position and locking of door mechanism in high position (Ref. 52-10-20, P. Block 501).

(4)Interior Control Handle (Ref. Fig. 406)
(a)Install handle (131) in original position as marked on gearbox splined shaft (132).
(b)Install screw (136) with washer (137) and TORQUE screw to between 1.8 and 2.0 m.daN (159 and 177 lbf.in.).
(c)Position bonding strap (133) and install screw (135) with washer (134). For electrical bonding refer to 20-28-11, P. Block 1.
(d)Check operation of interior control handle (Ref. 52-10-20, P. Block 501).

(5)Interior Control Handle Latch Assembly (Ref. Fig. 406)
(a)Position latch assembly (143) in door.
(b)Position bonding strap (138) and install bolts (144), washers (145) and nuts (139). For electrical bonding refer to 20-28-11, P. Block 1.
(c)Install bolts (142), washers (141) and nuts (140).
(d)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(e)Check operation of latch assembly (143).

(6)Exterior Control Handle (Ref. Fig. 407)
(a)Position handle (170) in door and install spacer (175) and spacer mount (176).
(b)Slide gearbox splined shaft (174) forward through handle (170) using tool set P/N 98A52108007000.
(c)Install washer (173) and nut (172). TORQUE nut to between 0.55 and 0.60 m.daN (48.7 and 53.1 lbf.in) and safety with cotter pin (171).
(d)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(e)Install gearbox flange (204), bonding strap (214), bolts (209), washers (208) and nuts (213). For electrical bonding refer to 20-28-11, P. Block 1.
(f)Install bolt (212), washer (211) and nut (210).
NOTE : Bolt (212) is installed from the opposite direction to other bolts.

(g)Position bonding strap (205) and install bolt (207), washer (206) and nut (200). For electrical bonding refer to 20-28-11, P. Block 1.
(h)Apply primer (Mat. No. 16-001) and top coat (Mat. No. 16-002) to untreated bolts, washers and nuts in gearbox flange (204).
(j)Tighten tension bolt (10) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator installed on aircraft (Ref. Fig. 402).
(k)Remove sling P/N 98A52108004000 from door.
(l)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).
(m)Safety tension bolt (10) with lockwire (11) (Ref. Fig. 402).
(n)Check door closed position, door high position, locking of door mechanism in high position and flap of exterior control handle (Ref. 52-10-20, P. Block 501).
(p)Apply corrosion-preventive paste (Mat. No. 05-002) to screws (232) and washers (231) and install with cover (230) to door.

(7)Gearbox and Locking Hook (Ref. Fig. 407)
(a)Insert gearbox (174) into door through opening of gearbox flange (204).
NOTE : Make certain O-ring on gearbox forward flange is not damaged.
(b)Install bolts (215), washers (216) and nuts (217).
(c)Install exterior control handle (Ref. Para. 3.D. (6)).
(d)Install gearbox flange (204), bonding strap (214), bolts (209), washers (208) and nuts (213). For electrical bonding refer to 20-28-11, P. Block 1.
(e)Install bolt (212), washer (211) and nut (210).
NOTE : Bolt (212) is installed from the opposite direction to other bolts.

(f)Position bonding strap (205) and install bolt (207), washer (206) and nut (200). For electrical bonding refer to 20-28-11, P. Block 1.
(g)Clean bushes (189, 191, 196, 198), apply corrosion-preventive paste (Mat. No. 05-002) and install in lever (185).
(h)Position pushrod (190), install bolt (192), washers (188) and nut (187) and safety with cotter pin (186).
(j)Position pushrod (197), install bolt (199), washers (195), nut (194) and safety with cotter pin (193).
(k)Install locking hook assembly (183) to gearbox (174).
1 Apply corrosion-preventive paste (Mat. No. 05-002) to locking hook assembly (183), lockplate (184) and bushes (220, 180).
2 Install locking hook assembly (183) and lockplate (184) in gearbox (174) with washer (203) and nut (202), TORQUE nut to between 1.0 and 1.1 m.daN (88.5 and 97.4 lbf.in.) and safety with cotter pin (201).
3 Install bushes (220, 180) in locking hook assembly (183), position pushrod (221), install bolt (181), washers (182) and nut (218) and safety with cotter pin (219).
(l)Apply primer (Mat. No. 16-001) and top coat (Mat. No. 16-002) to untreated bolts, washers and nuts in gearbox flange (204) and forward flange of gearbox (174).
(m)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(n)Install interior control handle (131) (Ref. Para. 3.D. (5)).
(p)Tighten tension bolt (10) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator placard installed on aircraft (Ref. Fig. 402).
(q)Remove sling P/N 98A52108004000 from door.
(r)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).
(s)Safety tension bolt (10) with lockwire (11) (Ref. Fig. 402).
(t)Check door locking, door closed position, door high position, locking of door mechanism in high position, flap of exterior control handle and interior control handle (Ref. 52-10-20, P. Block 501).

(8)Twin Lever (Ref. Fig. 408)
(a)Install bushes (254) in door structure.
(b)Install sleeve (252) in twin lever (265) and position twin lever (265) in door with washers (253).
(c)Install bolt (264), washers (255) and nut (256), TORQUE nut to between 1.0 and 1.1 m.daN (88.5 and 97.4 lbf.in.) and safety with cotter pin (257).
(d)Clean bushes (260, 261), apply corrosion-preventive paste (Mat. No. 05-002) and install in twin lever (265).
(e)Position pushrods (259, 263), install bolts (262), washers (258) and nuts (251) and safety with cotter pins (250).
(f)Tighten tension bolt (10) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator placard installed on aircraft (Ref. Fig. 402).
(g)Remove sling P/N 98A52108004000 from door.
(h)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).
(j)Safety tension bolt (10) with lockwire (11) (Ref. Fig. 402).
(k)Check door closed position, door high position and locking of door mechanism in high position (Ref. 52-10-20, P. Block 501).
(l)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(9)Lifting Shaft (Ref. Fig. 409)
(a)Install roller assembly to levers of lifting shaft.
1 Clean bush (335), apply corrosion-preventive paste (Mat. No. 05-002) and install in lever of lifting shaft.
2 Install roller (336), bolt (337), washer (333), nut (332), TORQUE nut to between 0.29 and 0.34 m.daN (25.7 and 30.1 lbf. in.) and safety with cotter pin (331).
(b)Install forward bearing (340).
(c)Slide fork end of lifting shaft half (321) into opening of bearing flange (317), insert forward end into door and slide forward until correctly positioned.
(d)Slide aft end of lifting shaft half (303) into aft bearing (340) opening until fork end is clear of bearing flange (317) support structure, install aft bearing (340) and bearing flange (317) and slide lifting shaft half (303) forward until correctly positioned.
(e)Install bolts (315), washers (316) and nuts (318).
(f)Install nut (319), TORQUE nut to between 2.0 and 3.0 m.daN (14.75 and 22.12 lbf. ft.) and safety with lockwasher (320) using tool set P/N 98A52108007000.

(g)Install universal joint between lifting shaft halves (303, 321).
1 Move lifting shaft half (321) fork end clear of lifting shaft half (303) fork end and install swivel bearing block (314).
2 Install pin (290), bushes (297), bolt (313), washers (294) and nut (295) and safety with cotter pin (296).
(h)Clean bushes (282, 281, 298, 300, 307, 310) and apply corrosion-preventive paste (Mat. No. 05-002).
(j)Connect pushrod (308) to lever (306).
1 Install bushes (307, 310) in lever (306).
2 Position pushrod (308), install bolt (304), washers (305), nut (311) and safety with cotter pin (312).
(k)Connect pushrods (299, 309) to lever (301).
1 Install bushes (298, 300) in lever (301).
2 Position pushrods (299, 309), install bolts (302), washers (292), nuts (291) and safety with cotter pins (293).
(l)Connect spring (284) and extendable rod (280) to lever (287).
1 Install bushes (282, 281) in lever (287).
2 Position extendable rod (280), spring (284) and bush (283), install bolts (285), washers (286), nuts (289) and safety with cotter pins (288).
(m)Install lifting arms (334) in original position as marked on each end of lifting shaft halves (303, 321).
(n)Install nuts (341), TORQUE nuts to between 1.47 and 1.96 m.daN (130.1 and 173.5 lbf.in.) and safety with lockwashers (342) using tool set P/N 98A52108007000.
(p)Tighten clamp bolts (330) of lifting arms (334).
(q)Tighten tension bolt (10) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator placard installed on aircraft (Ref. Fig. 402).
(r)Remove sling P/N 98A52108004000 from door.
(s)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).
(t)Safety tension bolt (10) with lockwire (11) (Ref. Fig. 402).
(u)Check door closed position, door high position and locking of door mechanism in high position (Ref. 52-10-20, P. Block 501).
(v)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

(10)Torsion Bar Spring and Torque Shaft (Ref. Fig. 410)
(a)Slide aft end of torsion shaft (370) into opening of bearing flange (375), insert forward end of shaft into door and slide forward until correctly positioned.
(b)Position bearing flange (375) and install bolts (374) and nuts (376).
(c)Slide forward end of torque shaft (382) into aft bearing opening to allow installation of lever (387).
(d)Install lever (387) to torque shaft (382) with locating notches aligned.
(e)Install torque shaft bearing flange assembly (390) on torque shaft (382).
(f)Slide torque shaft (382) forwards until aft bearing and bearing flange (390) are correctly positioned and install bolts (389) and nuts (391).
(g)Install nuts (392, 380), TORQUE nuts to 0.98 m.daN (86.7 lbf.in.) and safety with lockwashers (381, 393) using tool set P/N 98A52108007000.
(h)Slide torsion bar (377) into aft end of torque shaft (382) and slide forwards until correctly positioned in torsion shaft (370) and with position marks correctly aligned.
(j)Install covers (368, 378) and circlips (367, 379).
(k)Install split bushes (360) with clamp (361) and make certain that clearance 'a' between torque shaft end and bushes is 2.0 mm (0.08 in.).
(l)Connect torque shaft lever.
1 Install bolt (388), nut (386) and safety with cotter pin (385).
2 Clean bushes (365, 372), apply corrosion-preventive paste (Mat. No. 05-002) and install in torque shaft lever (387) and pushrod (362).
3 Position pushrod (362) and washers (366), install bolt (383), washers (384), nut (363).
4 TORQUE nut (363) to between 0.3 and 0.35 m.daN (26.6 and 31.0 lbf.in.) and safety with cotter pin (364).
(m)Install tension bolt assembly.
1 Position bush (373) and install pin (371).
2 Install tension bolt (10) with spherical washer (369).
(n)Tighten tension bolt (10) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator placard installed on aircraft (Ref. Fig. 402).
(p)Remove sling P/N 98A52108004000 from door.
(q)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).
(r)Safety tension bolt (10) with lockwire (11) (Ref. Fig. 402).
(s)Check door locking, door closed and door high positions (Ref. 52-10-20, P. Block 501).
(t)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

(11)Upper Connection Link (Ref. Fig. 411)

(a)Install sleeve (423) and washers (409) in upper connection link (410).

NOTE : Chrome-plated faces of washers (409) must contact connection link (410).

(b)Position connection link (410) and washers (407) and install shaft (408) and bush (422) from aft side of connection link.

(c)Install washers (406, 421) and nuts (405, 420).

R NOTE : Provide for clearances 'b' of 0.010-0.025 mm (0.0004-0.0010 in.)
R between washers (407) and (409) by equally working non-chromed
R faces of washers (409).

R NOTE : After rework, faces of washers (409) must have a surface
R finish of not more than 1.6 microns.

R (d)Safety nuts (405, 420) with cotter pins (404, 419).

R (e)Position bonding straps (400, 403) and install bolt (402) and washer (401). For electrical bonding refer to 20-28-11, P. Block 1.

R (f)Connect door 'high' position locking hook (418).

1 Clean bushes (413, 414), apply corrosion-preventive paste (Mat. No. 05-002) and install in locking hook (418).

2 Position pushrod (411), install bolt (412), washer (415), nut (417) and safety with cotter pin (416).

R (g)Connect upper connection link (410) to support arm (Ref. 52-13-11, P. Block 401).

R (h)Tighten tension bolt (10) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator placard installed on aircraft (Ref. Fig. 402).

R (j)Remove sling P/N 98A52108004000 from door.

R (k)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).

R (l)Safety tension bolt (10) with lockwire (11) (Ref. Fig. 402).

R (m)Carry out adjustment/test of support arm and connection links (Ref. 52-10-12, P. Block 501).

R (n)Make certain that locking hook (418) locks door in 'high' position correctly (Ref. 52-10-20, P. Block 501).

R (p)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

(12)Lower Connection Link (Ref. Fig. 412)
(a)Install sleeve (441) and washers (435) with chrome-plated faces contacting connection link (436).
(b)Position lower connection link (436) and washers (433) and install shaft (434) and bush (440) from aft side of connection link.
(c)Install washers (432, 437) and nuts (431, 438).
R NOTE : Provide for clearances 'c' of 0.010-0.025 mm (0.0004-0.0010 in.)
R between washers (433) and (435) by equally working non-chromed
R faces of washers (435).
R NOTE : After rework, faces of washers (435) must have a surface finish
R of not more than 1.6 microns.
R (d)Safety nuts (431, 438) with cotter pins (430, 439).
R (e)Position bonding strap (442) and install bolt (450) and washer (451). For electrical bonding refer to 20-28-11, P. Block 1.
R (f)Connect torsion bar pushrod (446).
1 Clean bushes (447, 448), apply corrosion-preventive paste (Mat. No. 05-002) and install in connection link (436).
2 Position pushrod (446), install bolt (449), washers (443) and nut (445), TORQUE nut to between 0.3 and 0.35 m.daN (26.6 and 31.0 lbf.in.) and safety with cotter pin (444).
R (g)Connect lower connection link (436) to support arm (Ref. 52-13-11, P. Block 401).
R (h)Tighten tension bolt (10) until torsion shaft indicator notch is aligned with relevant mark on torsion indicator placard installed on aircraft (Ref. Fig. 402).
R (i)Remove sling P/N 98A52108004000 from door.
R (k)Carry out adjustment/test of compensation mechanism (Ref. 52-10-11, P. Block 501).
R (l)Safety tension bolt (10) with lockwire (11) (Ref. Fig. 402).
R (m)Carry out adjustment/test of support arm and connection links (Ref. 52-10-12, P. Block 501).
R (n)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

E. Test
(1)Close and open door several times to check operation.
(2)Make certain that gaps between door and fuselage are correctly adjusted (Ref. 52-10-12, P. Block 601).
(3)Carry out operational test of door warning switches for AFT passenger/crew door (Ref. 52-71-11, P. Block 501).
(4)Carry out operational test of escape slide visual warning (Ref. 52-73-13, P. Block 501).

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove hoisting lugs (2) and degrease with cleaning agent (Mat. No. 11-004) (Ref. Fig. 401).
(3)Apply corrosion-preventive paste (Material No. 05-002) to hoisting lugs (2) and install in reverse position in door flush with skin.
(4)Install self-adhesive discs (3) (Material No. 05-052) over hoisting points (Ref. 11-20-00, P. Block 1).
(5)Check moisture-removing oil (Material No. 05-027) for good condition on inner surface of door and locking mechanism and renew if necessary (Ref. 51-75-10, P. Block 801).
(6)Apply grease (Material No. 04-017) to exterior control handle mechanism.
R (7)Remove ballast weight assy PN 98A52108008000 or support frame
R PN 98A52108008001 with the appropriate ballast weight.
(8)Install sidewall lining, where removed (Ref. 25-23-41, P. Block 401).
(9)Install door insulation and lining (Ref. 52-10-13, P. Block 401).
(10)Install dual escape slide (Ref. 25-61-21, P. Block 401) if removed.
(11)Install slide raft (Ref. 25-61-22, P. Block 401) if removed.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(12)Arm emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301).
(13)Remove crane and access platform.

1. General

A. Two emergency exits are incorporated in the passenger compartment to allow evacuation of passengers in an emergency. The exits are closed by doors which have escape slides attached.

B. The emergency exits are located above the wings on each side of the fuselage between STA2347(FR42) and STA2453(FR44), in the fuselage center section.

C. Opening and closing of the exits is controlled by interior and exterior control handles. The exits open outwards and downwards until nearly parallel to the wings.

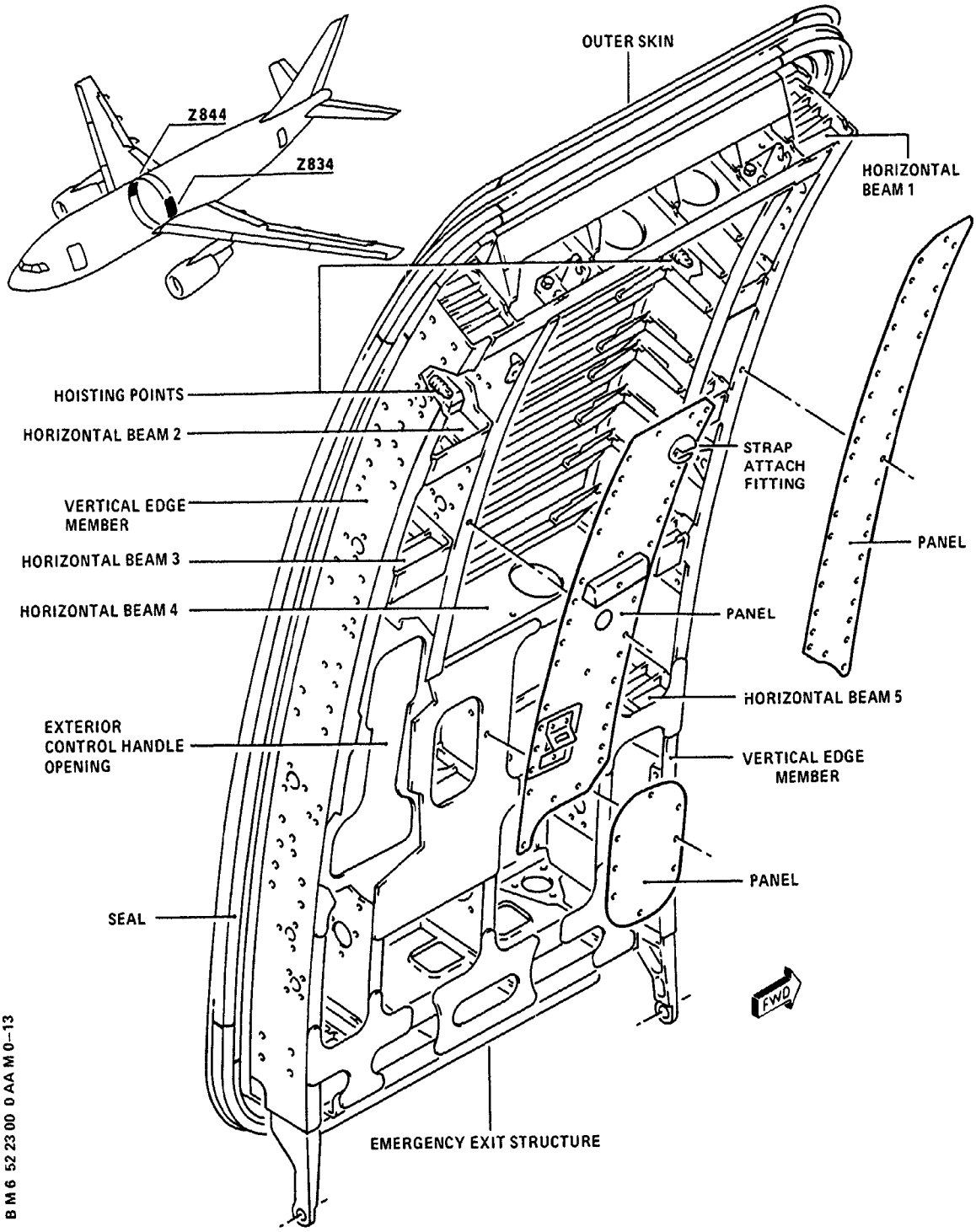
D. Before the exits can be closed, a locking latch, on each damper cylinder, must be raised. A strap is connected to the exit to assist closing.

E. The exits have two modes of operation, normal (DISARMED) and emergency (ARMED). In either mode the exits can be opened from inside or outside the aircraft. An emergency control handle safety pin must be removed before the emergency control handle can be moved to emergency (ARMED). In the emergency (ARMED) mode, lifting the interior control handle and pushing the exit outwards operates the emergency escape slide automatically. When opened from outside, the emergency control handle returns to DISARMED and the exit to normal operating mode.

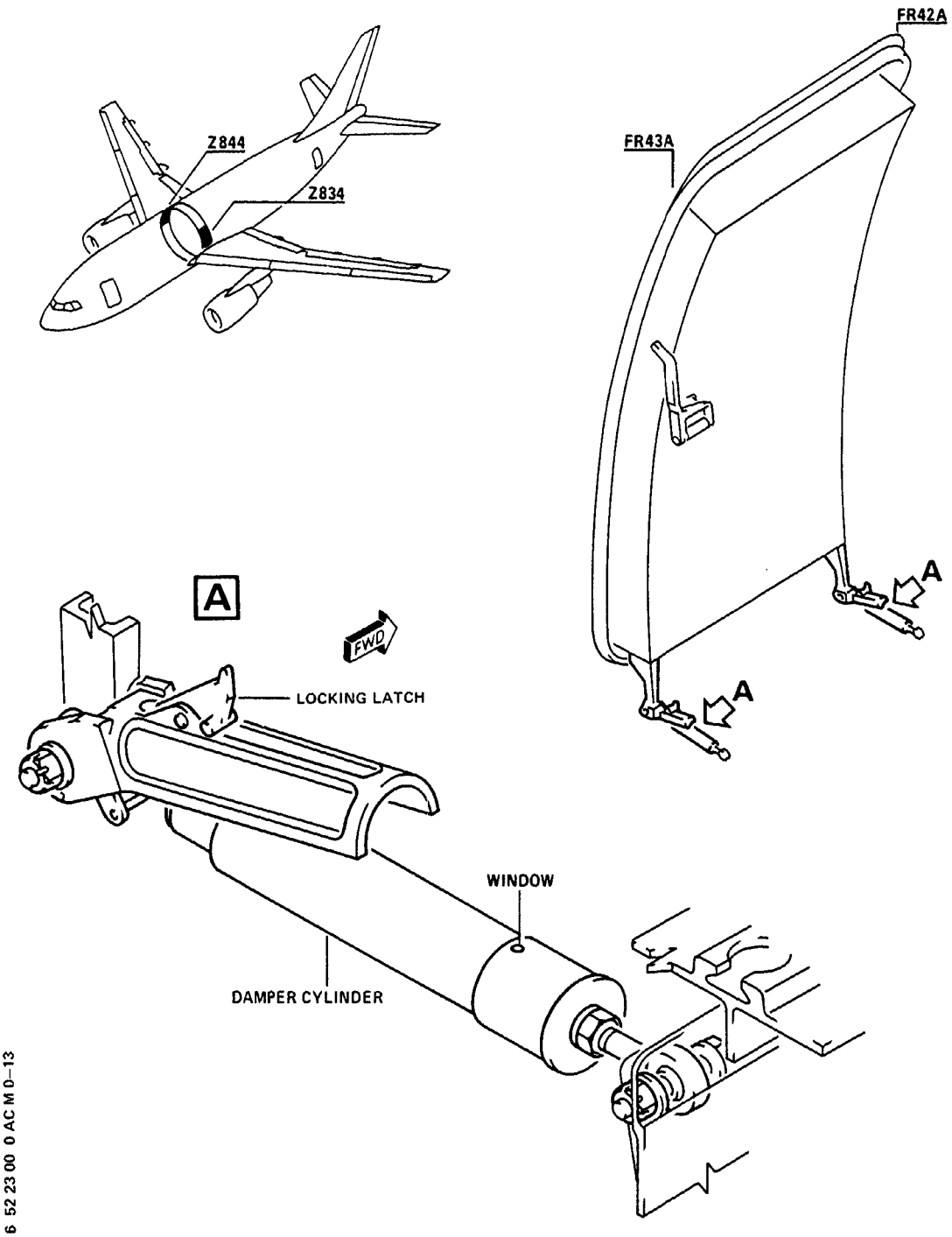
F. Various fittings are attached to the exit frame and fuselage exit frame to assist in closing or opening the exit.

2. Component Location
(Ref. Fig. 001, 002, 003)
(Ref. Fig. 004, 005, 006)

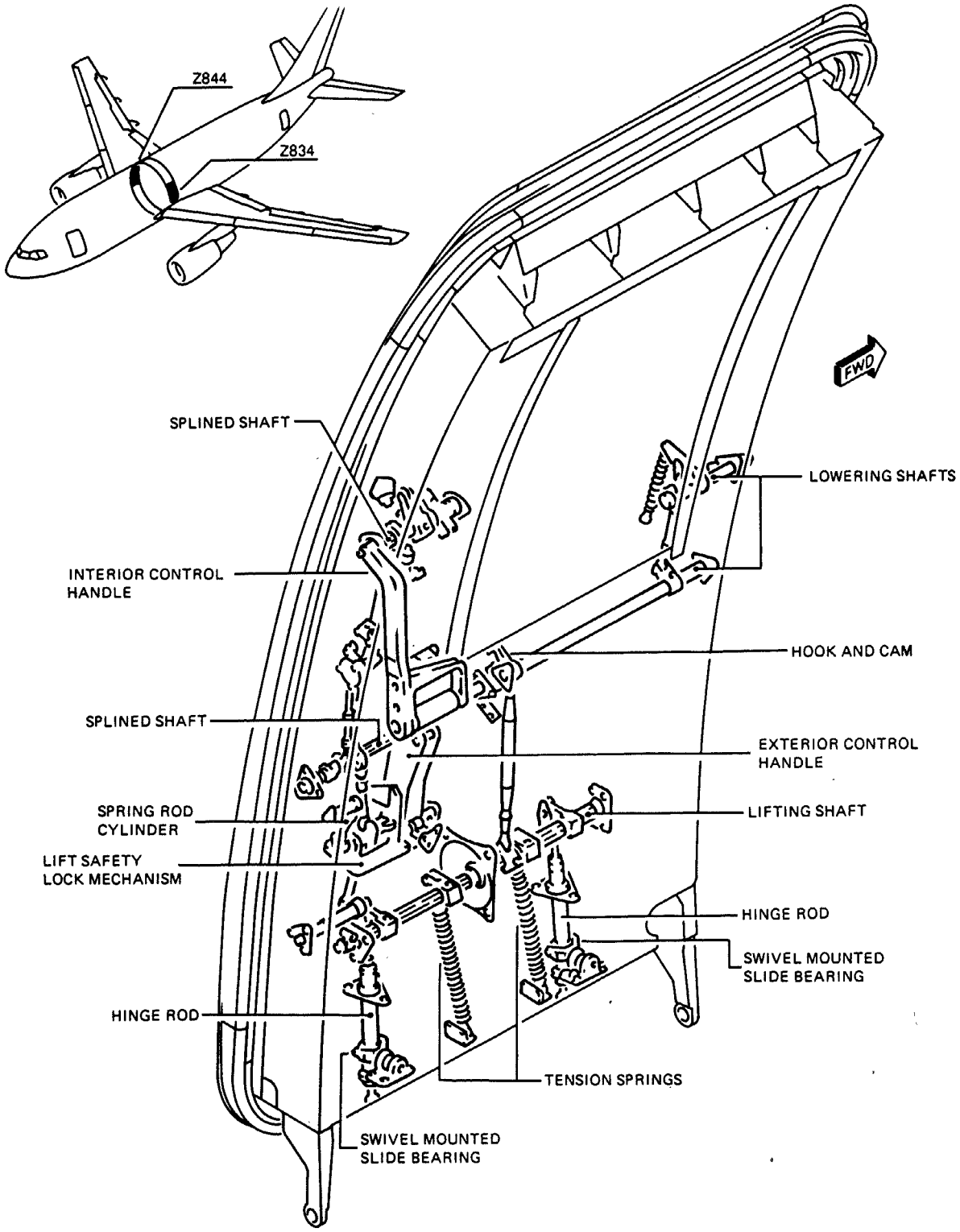
FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
	STRUCTURE-EXIT		834 844		
	SEAL-EXIT		834 844		52-23-18
	CYLINDER-DAMPER		834 844		52-23-14
	HANDLE-CONTROL, INTERIOR		834 844		52-23-21
	SHAFTS SPLINED		834 844		52-23-21
	HANDLE-CONTROL, EXTERIOR		834 844		52-23-21
	SHAFTS-LOWERING		834 844		52-23-21
	SHAFT-LIFTING		834 844		52-23-21
	MECHANISM-LIFT SAFETY LOCK		834 844		52-23-21
	RODS-HINGE		834 844		52-23-21
	HANDLE-CONTROL, EMERGENCY		834 844		52-23-22
	ASSEMBLY-UPPER		834 844		52-23-22
	ASSEMBLY-LOWER		834 844		52-23-22
	ASSEMBLY-CONNECTION		834 844		52-23-22
	FITTING-STOP		834 844		52-23-31
	FITTING-GUIDE		834 844		52-23-31
	FITTING-CENTERING		834 844		52-23-31
	STOP-LOWERING		834 844		52-23-31
	ASSEMBLY-CABLE, SUPPORT		834 844		52-23-31
	ASSEMBLY-COVER, HANDLE		834 844		52-23-13
	COVER-SLIDE, EMERGENCY ESCAPE		834 844		52-23-13



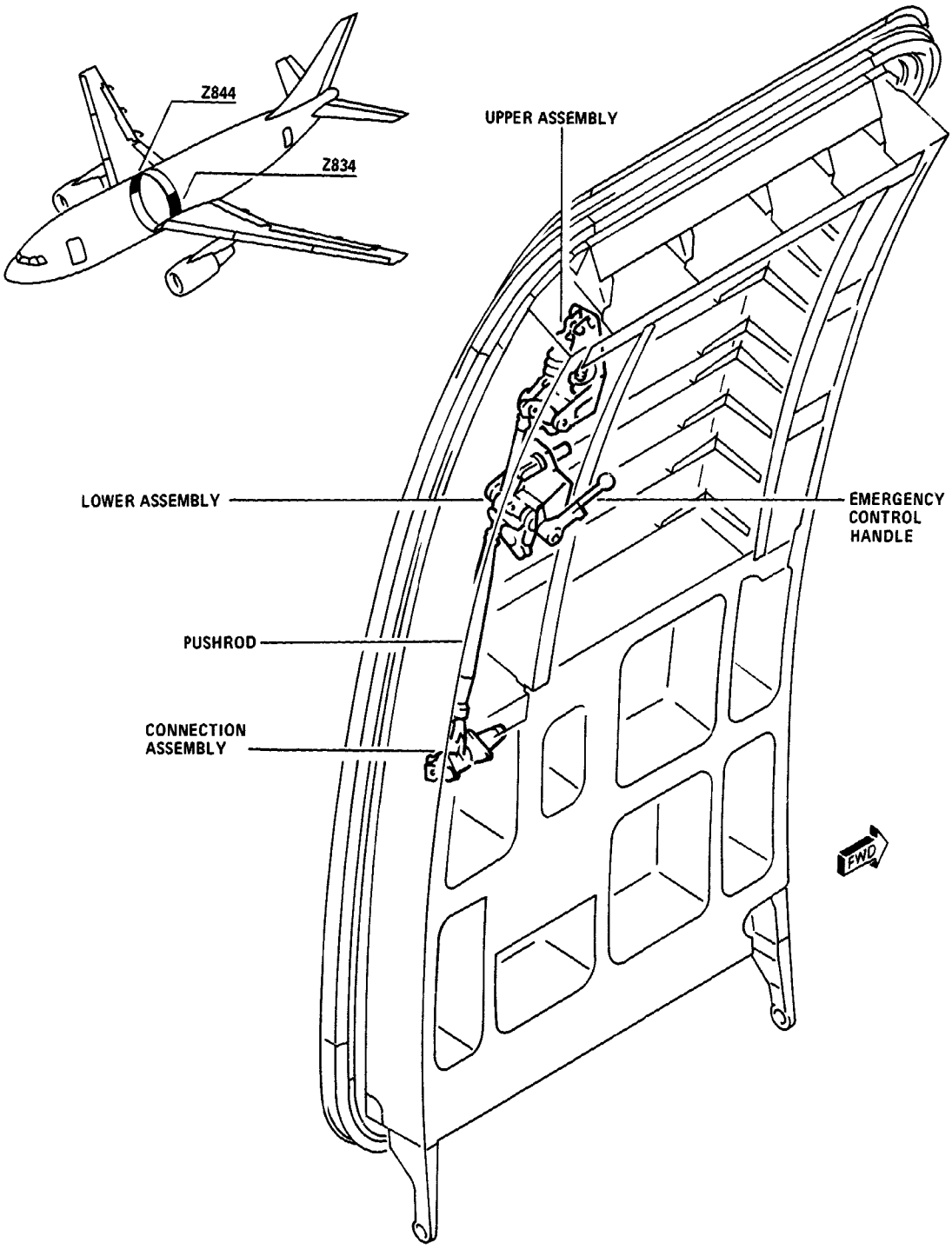
Emergency Exit Structure and Seal
Figure 001



Damper Cylinder
Figure 002

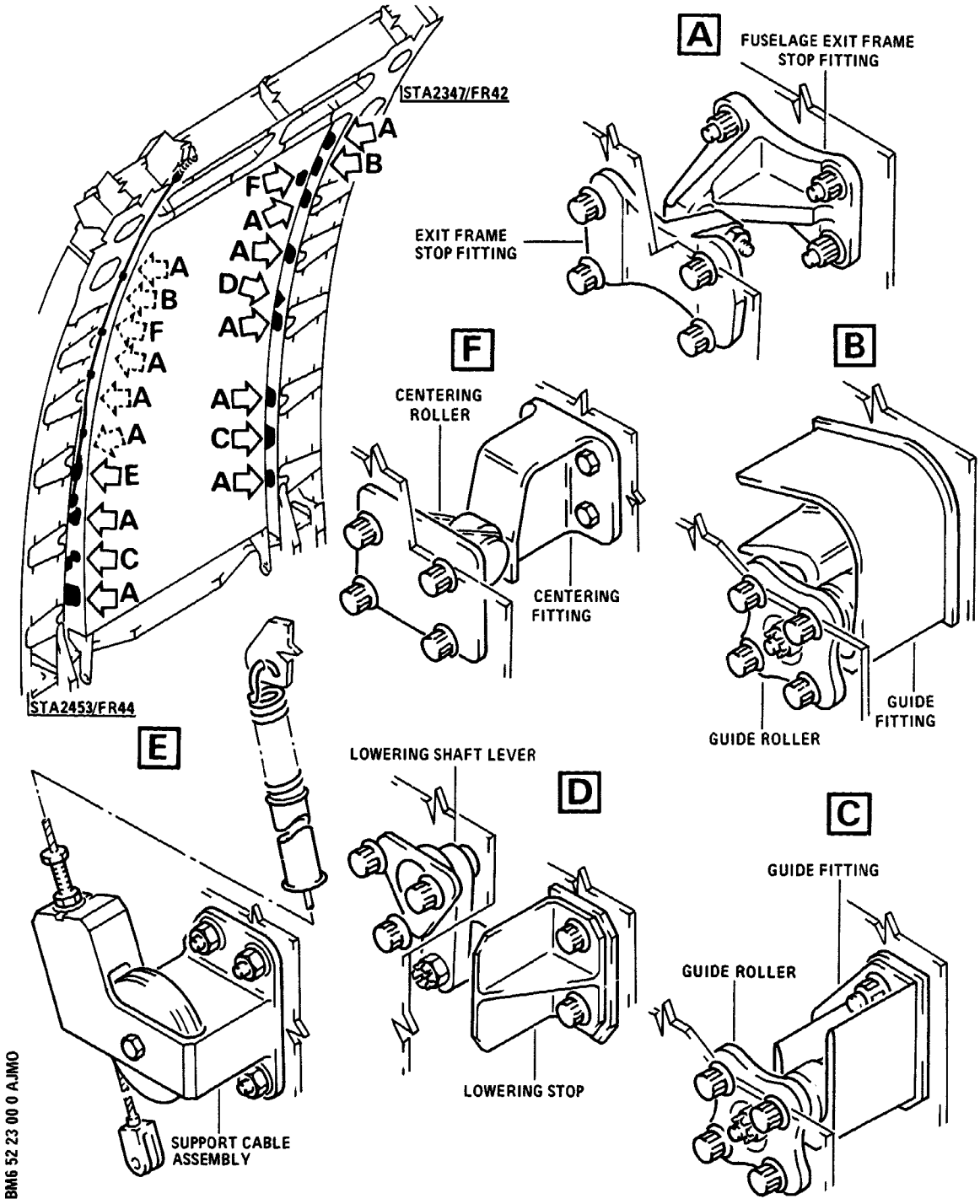


Locking Mechanism
Figure 003

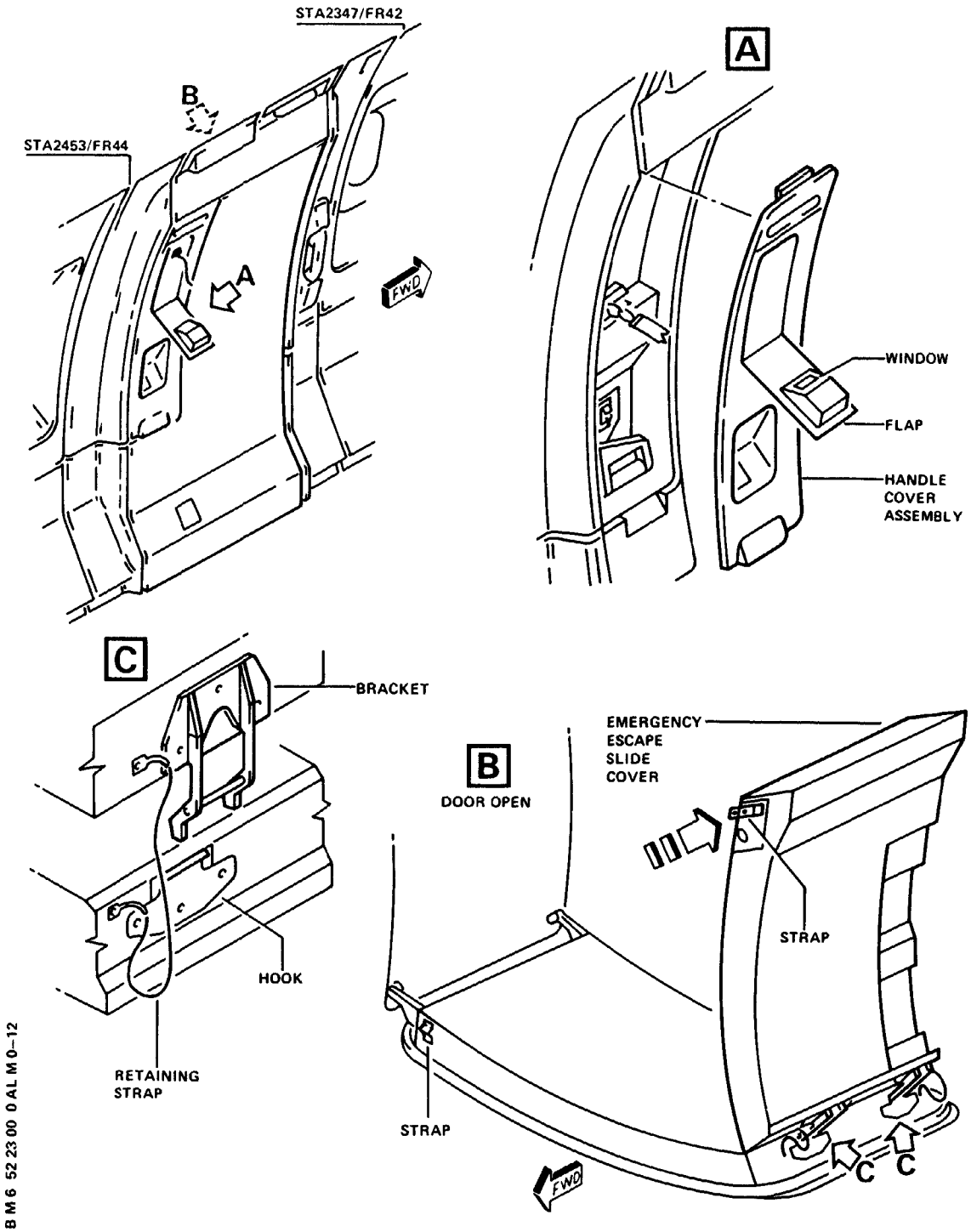


BM6 52 23 00 0 AGMO

Emergency Escape Slide Release Mechanism
Figure 004



Fittings
Figure 005



Lining and Insulation
Figure 006

3. Description

NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand. The LH exit only is described and illustrated.

A. Major component assemblies are as follows:
- Structure and seal
- Damper cylinder
- Locking mechanism
- Emergency escape slide release mechanism
- Fittings
- Lining and insulation

B. Exit Structure and Seal (Ref. Fig. 001)

(1)Description and Operation.

(a)The exit structure comprises aluminum alloy components riveted together. Major components are a chemically etched outer skin, formed sheet metal inner skin, milled horizontal beams and milled and formed sheet metal vertical frame segments. Lightening and component access holes are incorporated in the inner skin, horizontal beams and frame segments.

(b)An opening is provided in the outer skin for the exterior control handle. A pressure-sealed box, with a detachable panel on the inner skin, is incorporated around the opening to maintain fuselage pressurization.

(c)To assist in the removal and installation of the emergency exit, hoisting lugs are installed in the exit structure. Self-adhesive discs cover the hoisting points to prevent corrosion.

(d)The exit seal is a rubber extrusion, with equally spaced pressurization holes, secured to the exit by retainers and screws. When the exit is closed, the seal is compressed by a sealing section on the fuselage exit frame and inflated by cabin air pressure to form a pressure seal.

C. Damper Cylinder (Ref. Fig. 002)

(1)Description

(a)The emergency exit damper cylinder, installed between the lower part of the exit structure and the fuselage, limits the travel speed of the emergency exit when opening normally or in emergency.

(2)Operation

(a)When opening the exit, damping is effected by hydraulic fluid passing through a restrictor in the damper cylinder as the damper cylinder ram extends.

(b)The oil level, in the damper cylinder, is indicated through a window located in the lower end of the damper cylinder body.

(c)An automatic lock engages when the ram is fully extended. The lock must be manually released before closing the exit.

(d)When closing the exit, no restriction is felt as the damper cylinder ram retracts.

D. Exit Locking Mechanism (Ref. Fig. 003)

(1)Description

(a)The exit locking mechanism main components are exterior and interior control handles, a lifting shaft, lowering shafts and tension springs.

(b)The emergency exit is hinged about the lower edge by hinge rods. Each hinge rod, at the upper end, is attached to and forms part of, the exit locking mechanism. The lower end is attached to hinge fittings mounted on the exit threshold.

(c)The exit is attached to the hinge rods by swivel-mounted slide-bearings.

(d)A lift safety-lock mechanism, incorporating a spring rod cylinder, ensures that the exit locking mechanism is fully engaged when the exit is closed and locked.

(2)Operation

(a)The locking mechanism is manually operated by an exterior or interior control handle.

(b)When either the exterior or interior control handle is operated the movement is transferred, via the locking mechanism, to the lifting shaft and lift safety-lock mechanism.

(c)As the lifting shaft rotates, levers, which are mounted on the shaft and connected to the hinge rods, lift the exit, via swivel mounted slide bearings, clear of the stop fittings. At the same time the locking lever of the lift safety-lock mechanism, rotates clear of the lifting shaft.

(d)The lift safety lock mechanism is pulled into a dead-center position, overcoming a spring-rod cylinder, as the exit is opened.

(e)A hook on the lower lowering-shaft engages a cam and locks the exit in the raised position.

(f)As the exit closes, an arm on the upper lowering-shaft contacts a lowering-stop rotating the upper and lower lowering-shafts, releasing the hook and cam.

(g)The tension-springs of the lift compensation mechanism assist the raising and lowering of the exit.

E. Emergency Escape Slide Release Mechanism (Ref. Fig. 004)

(1)Description

(a)The main components of the emergency escape slide release mechanism are an upper assembly, lower assembly and connection assembly. All components are connected by either bellcrank levers, pushrods or splined shafts.

(b)An emergency control handle, which is part of the lower assembly, is used for arming or disarming the emergency escape-slide system.

(c)Connection between the emergency escape-slide release mechanism and the exit locking mechanism, is by a roller on the connection assembly, and a fork on the exterior control handle. When the exterior control handle is operated, the release mechanism for the emergency escape slide is returned automatically to **DISARMED** by the roller and fork.

(d)A spring-rod cylinder in the upper assembly ensures positive operation of the emergency escape-slide system.

(2)Operation
(a)As the emergency control handle is moved to the **ARMED** position, a pin, in the lower assembly, extends via a linkage and arms the emergency escape-slide. At the same time, a spring-rod cylinder in the upper assembly, ensures the escape-slide release mechanism is locked in position as the roller of the connection assembly engages the fork of the exit locking mechanism.
(b)If the exterior control handle is operated when the emergency control handle is in **ARMED** the roller of the connecting assembly, engaged in the fork of the exit locking mechanism, moves the emergency control handle, via the mechanism, towards **DISARMED**. The spring-rod cylinder completes the movement as dead-center is passed.
(c)Movement of the emergency control handle to **DISARMED** withdraws the pin in the lower assembly, disarming the emergency escape-slide.
(d)The emergency control handle cannot be moved to **ARMED** when the exit is open.

F. Emergency Exit Fittings (Ref. Fig. 005)
(1)Description
(a)Various fittings are attached to the exit frame, and fuselage exit frame structure, to assist in opening and closing the emergency exits.
(b)The fittings are as follows:
1 Stop fittings
2 Guide fittings
3 Centering fittings
4 Lowering stop
5 Support cable assembly
(2)Operation
(a)Adjustable stop fittings, with mating stop fittings on the fuselage exit frame, transfer pressurization loads to the aircraft structure. The exit cannot be opened until raised sufficiently for mating stop fittings to clear.
(b)Guide-rollers, running in guide-fittings, attached to the fuselage exit frame, ensure that the exit is raised and lowered smoothly.
(c)Should the exit not be in the correct position, during final closing, centering-rollers contact centering-fittings on the fuselage exit frame to correct the exit position.
(d)As the exit is closed, an arm on the upper lowering-shaft contacts the lowering-stop rotating the lowering-shaft mechanism.
(e)The support-cable assembly is attached to the fuselage exit frame and the aft vertical edge member of the emergency exit. The support cable limits the range through which the exit can be opened.
(f)As the exit closes the support cable is returned to the retracted position by spring tension.

G. Lining and Insulation (Ref. Fig. 006)

(1) Description

(a) The emergency exit lining comprises a handle cover assembly and emergency escape slide cover.

(b) The handle cover assembly covers the interior control handle and the emergency control handle. It is retained in position by a spring catch, and must be removed before opening the emergency exit during maintenance.

(c) Quick-release fasteners on straps at the lower surface, and hooks at the upper surface, retain the emergency escape slide cover in position.

(d) Heat and sound insulation covers the inside of the emergency exit beneath the exit lining.

(2) Operation

(a) A flap, in the handle cover assembly, can be opened for the installation of the escape slide safety pin and for gaining access to the emergency control handle.

(b) The position of the emergency control handle can be seen through a window in the flap when the flap is in the closed position.

(c) Should the emergency exit be opened from outside the aircraft, the handle cover assembly is released from the emergency exit by movement of the interior control handle.

(d) In an emergency, lifting the interior control handle will release the handle cover assembly from the emergency exit.

(e) As the exit lowers, and the escape slide inflates, the quick-release fasteners on the straps separate and allow the emergency escape slide cover to pivot about the hooks and brackets located at the upper surfaces.

(f) To retain the emergency escape slide cover in the vicinity of the exit, retaining straps are attached to the upper surfaces of the emergency exit and the emergency escape slide cover.

R CAUTION : CLOSE EXIT USING STRAP P/N 98A52208669000 ONLY.
NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand. The LH exit only is described and illustrated.

1. General

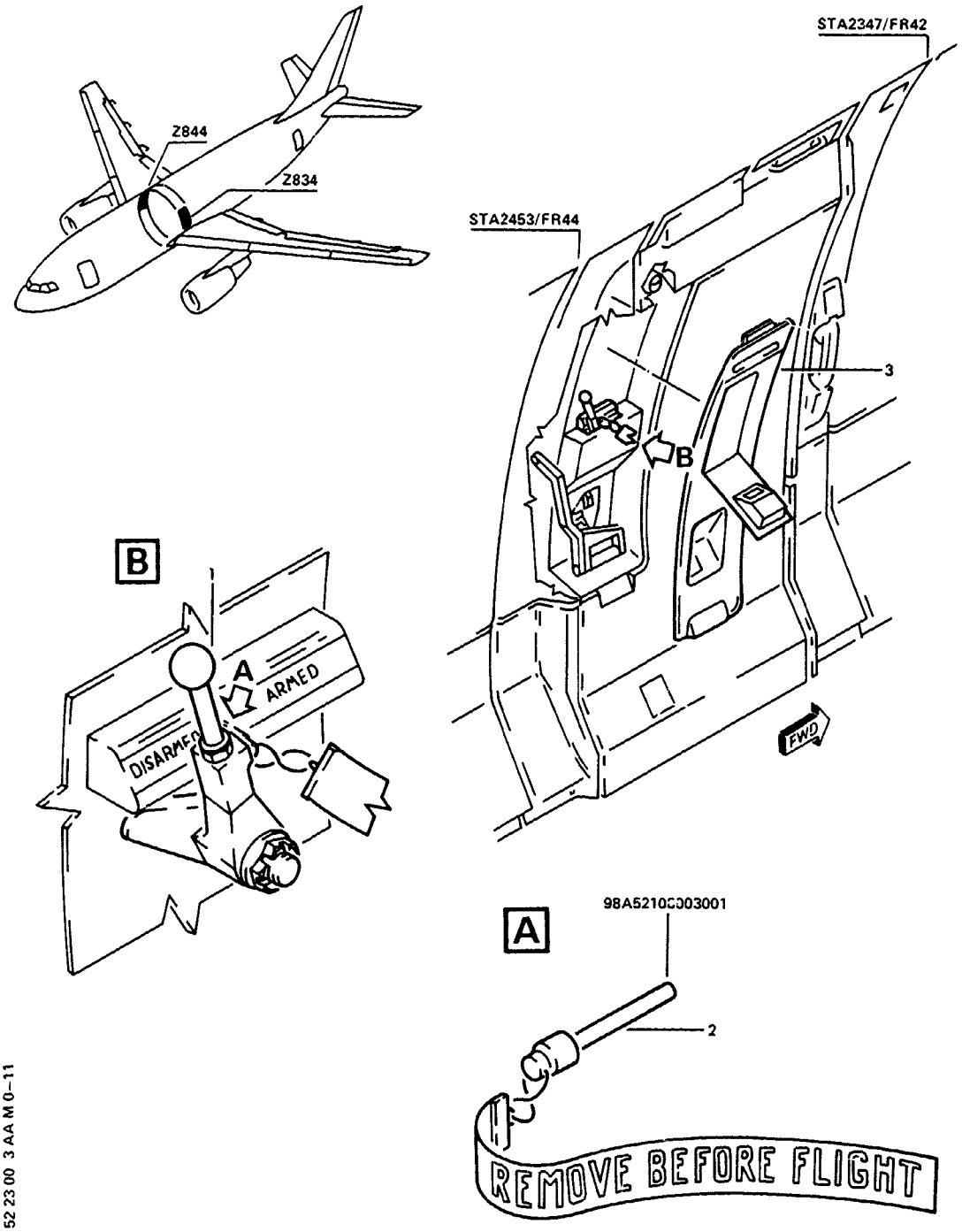
A. This topic details the procedure which must be carried out:
(1)Before and after any maintenance procedures on or near the emergency exit.
(2)During opening and closing the emergency exit.

2. Equipment and Materials

ITEM	DESIGNATION
A. 98A52108003001	Pin - Safety, Emergency Control Handle
R B. 98A52208669000	Strap - Emergency Exit Doors
C.	Circuit Breaker Safety Clips
D.	Warning Notices

3. Procedure

A. Before-maintenance:
(Ref. Fig. 301)
(1)Make certain that emergency control handle (1) is in **DISARMED** position.
(2)Install emergency control handle safety pin (2) **P/N 98A52108003001** and make certain emergency control handle (1) cannot be moved to **ARMED** position.



BM6 52 23 00 3 AA M0-11

Emergency Control Handle Safety Pin
Figure 301

(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & /WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

(4)Position warning notices prohibiting operation of flight controls in working area.

B. Opening Exit:
(1)Remove handle cover assembly (3).
(a)Pull lower edge of handle cover assembly (3) inboard to release spring catch.
(b)Lower handle cover assembly (3) and remove from emergency exit.
R (2)Connect strap P/N 98A52208669000 to exit.
(3)Make sure that travel range and area forward of exit are free of obstruction and personnel.
(4)Unlock and open exit.

C. Closing Exit:
(1)Lift locking latches on each damper cylinder.
(2)Swing panel above emergency exit down to vertical position.
CAUTION : DO NOT USE LOCKING HANDLE TO CLOSE EXIT.
R (3)Close exit using strap P/N 98A52208669000.
(4)Lock exit using locking handle.
(5)Check from outside that gap between lower edge of emergency exit exterior skin and fuselage skin at emergency exit threshold, is 5.0 +/-1.50 mm (0.19 +/-0.06 in.) (Ref. 52-23-11, P. Block 501, Para. B.(5).
R (6)Remove strap P/N 98A52208669000.

D. After-maintenance:
(Ref. Fig. 301)
(1)Make certain that emergency exit is fully closed, emergency control handle (1) is in DISARMED position and emergency control handle safety pin (2) is installed.
(2)Install handle cover assembly (3).
(a)Position upper edge of handle cover assembly (3).
(b)Press lower edge of handle cover assembly (3) until spring catch engages.
(3)Open flap of handle cover assembly (3) and display streamer of safety pin (2).
(4)Remove safety clips and tags and close circuit breakers 1WN and 2WN.
(5)Remove warning notices.

EMERGENCY EXIT - INSPECTION/CHECK

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

CAUTION : PERCENTAGE (%) OF ALLOWABLE DAMAGE IS ALWAYS RELATED TO THE NOMINAL MATERIAL THICKNESS AS SPECIFIED IN SRM (STRUCTURAL REPAIR MANUAL).

NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand. The LH exit only is described and illustrated.

NOTE : Should a defect be suspected during the following inspection/check, an approved nondestructive test must be carried out.
If a defect is subsequently proved to exist, a structural repair must be carried out, or component must be replaced.

NOTE : For the removal of scratches, marks and dents refer to 51-73-10, P. Block 801.
For the removal of corrosion, refer to 51-74-10, P. Block 801.

1. Reasons for the Job

R A. Inspection of the following components to make sure that they are free
R from damage:
R (1)Emergency Exit Structure.
R (2)Door Seal of Emergency Exit.
R (3)Support Cable Assembly.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D.	Rubber Mats
E.	Supports
F. Material No. 05-002	Special Materials (Ref. 20-31-00)
G. Material No. 05-027	Special Materials (Ref. 20-31-00)

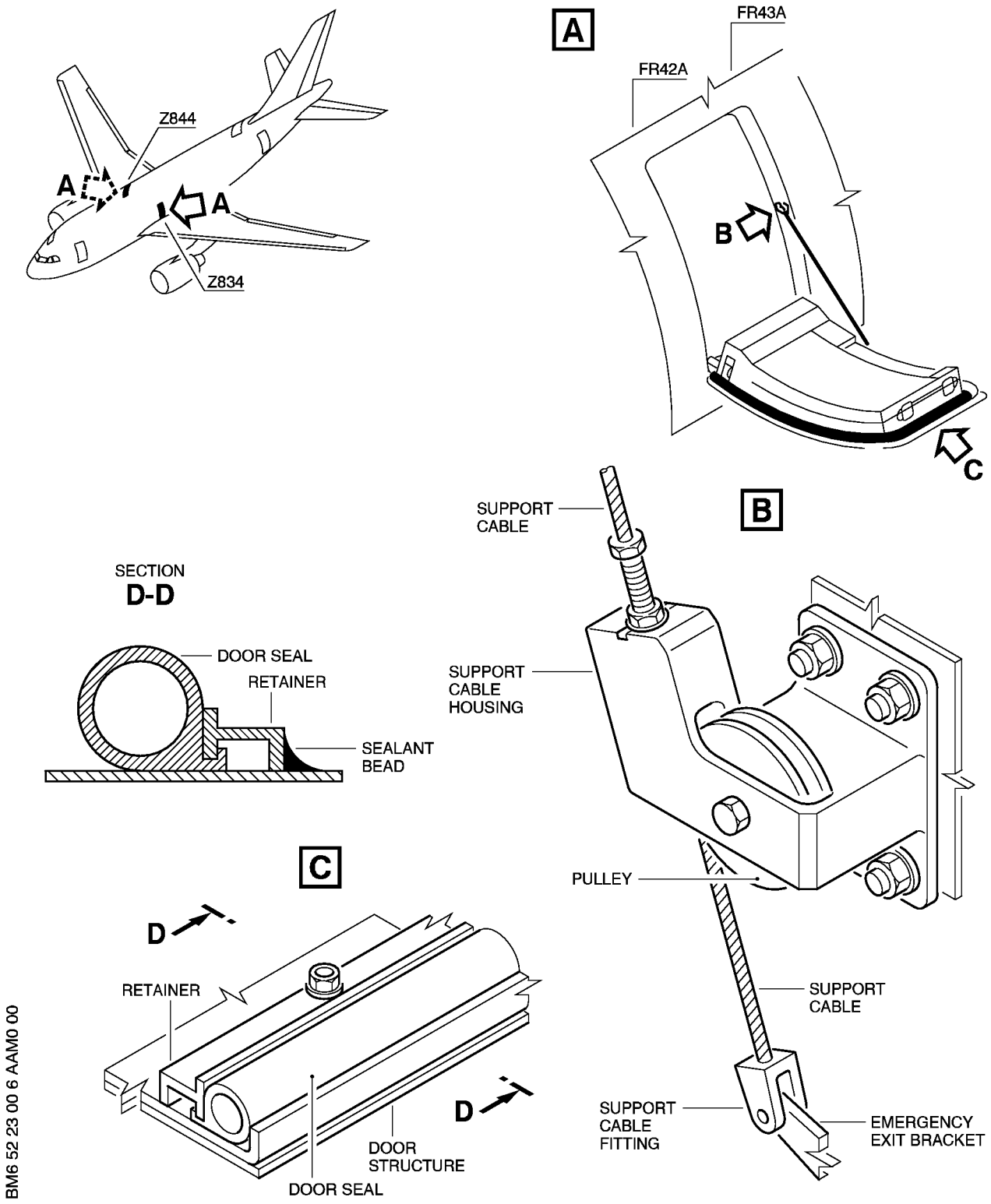
Referenced Procedures

- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-18, P. Block 401	Seal
- 52-23-18, P. Block 801	Seal
- 52-23-21, P. Block 601	Locking Mechanism
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism
- 52-23-22, P. Block 601	Emergency Escape Slide Release Mechanism
- 52-23-31, P. Block 601	Fittings

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Remove emergency control handle (Ref. 52-23-22, P. Block 401).
(8)Remove access panels.
(9)Remove emergency exit insulation.

B. Inspection/Check
R (Ref. Fig. 601)
R (1)Visual Inspection of the Emergency Exit Structure
R (a)The following areas have specific damage criteria:
R 1 Inner door skin.
R 2 Outer door skin.
R 3 Machined parts (frames and longerons).
R 4 For the damage limits for steps 1 to 3, refer to SRM 52-20-00, P. Block 101.
R (b)Should damage limits be exceeded, a structural repair must be done, or the component must be replaced.
R 1 For the removal of scratches, marks and dents, refer to 51-73-10, P. Block 801.
R 2 For the removal of corrosion, refer to 51-74-10, P. Block 801.
R 3 For the repair of paint coatings, refer to 51-75-10, P. Block 801.
R 4 For the repair of sealing, refer to 51-76-10, P. Block 801.
R (c)Make sure that the drain holes are clean and clear of obstruction and not blocked.
R (d)Inspect emergency exit for loose and missing rivets and security of attachment of hardware.
R (2)General Visual Inspection of the Door Seal
R (a)Inspect the door seal for cuts, chafe marks and wear:
R 1 If you find a damage of the door seal, repair it (Ref. 52-23-18, P. Block 801).
R 2 If required, replace the door seal (Ref. 52-23-18, P. Block 401).
R (b)Inspect the retainer for cracks, scratches and corrosion:
R 1 If you find corrosion, remove it (Ref. 51-74-10, P. Block 801).
R 2 If you find cracks or scratches, remove them (Ref. 51-73-10, P. Block 801).
R (c)Make sure that the attachment bolts and nuts of the retainers are correctly tightened.
R (d)Examine the sealant bead around the retainers for good condition and serviceability.
R (3)General Visual Inspection of the Support Cable Assembly
R (a)Inspect the support cable for chafe marks and wear:



Door Seal and Support Cable Assembly
Figure 601

R

R 1 If you find a damage, replace it (Ref. 52-23-31, P. Block 401).
R (b)Make sure that the attachment bolts and nuts of the support cable housing are correctly tightened.
R (c)Examine the security of the attachment between the support cable fitting and emergency exit bracket.
R (d)Make sure that the pulley moves freely.

C. Test
(1)Install emergency exit ballast weight P/N 98A52207607000 (98A52207614000).
(2)Carry out functional test of emergency exit and adjust if necessary (Ref. 52-23-11, P. Block 501).
(3)Open emergency exit and remove ballast weight.

D. Close-Up
(1)Make sure that all protruding thread ends are covered with corrosion-preventive paste (Mat. No. 05-002).
(2)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew if necessary (Ref. 51-75-10, P. Block 801).
(3)Make sure that working area is clean and clear of tools and miscellaneous items of equipment.
(4)Install emergency exit insulation.
(5)Install access panels.
(6)Install emergency control handle (Ref. 52-23-22, P. Block 401).
(7)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(8)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(9)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(10)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(11)Remove rubber mats and supports.
(12)Remove access platform.

WARNING : APPLY MATERIALS IN ACCORDANCE WITH MANUFACTUERS' INSTRUCTIONS. SOME MATERIALS ARE FLAMMABLE AND/OR TOXIC. AVOID INHALING FUMES. USE IN WELL VENTILATED AREA. FIRE REGULATIONS MUST BE OBSERVED. SOME MATERIALS CONTAIN IRRITANTS. WEAR PROTECTIVE GLOVES AND PROTECT EYES. WASH IMMEDIATELY, WITH CLEAN WATER, IF SKIN OR EYES ARE AFFECTED.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B.	Brush
C.	Emery Cloth (Grade 320)
D.	Lint-free Cloth
E.	Masking Paper
F.	Masking Tape
G.	Nonmetallic Scraper
H.	Protective Gloves
J.	Talcum Powder
K.	Rubber Mats
L.	Supports
M.	Compressed Air
N.	Vacuum Cleaner
P. Material No. 05-001	Special Materials (Ref. 20-31-00)
Q. Material No. 05-002	Special Materials (Ref. 20-31-00)
R. Material No. 05-005	Special Materials (Ref. 20-31-00)
S. Material No. 05-027	Special Materials (Ref. 20-31-00)
T. Material No. 11-001	Cleaning Agents (Ref. 20-31-00)
U. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
V. Material No. 13-002	Pretreatment for Painting (Ref. 20-31-00)
W. Material No. 16-001	Structure Paints (Ref. 20-31-00)
X. Material No. 16-002	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Safety emergency escape slide and door warning system (Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Remove emergency control handle (Ref. 52-23-22, P. Block 401).
(8)Remove access panels.
(9)Remove emergency exit lining and insulation.

B. Cleaning
(1)Mask moving parts i.e. bearings.
(2)Remove loose particles using nonmetallic scraper, vacuum cleaner or dry brush.
(3)Make certain drain holes are free from obstruction.
(4)Clean exit structure and mechanism with cleaning agent (Mat. No. 11-001).
NOTE : Cleaning agent must not be allowed to dry on surface.
Areas cleaned must be kept small enough to allow surface to be wiped dry.
(5)Remove foreign objects from depressions and edges using brush and vacuum cleaner. Should contamination be excessive, repeat Step (4).
(6)Rinse exit with clean water.
(7)Dry exit with lint-free cloth or oil-free compressed air.
(8)Remove masking tape and masking paper, if used.

C. Painting
(1)Exit Structure (Milled Alloy Structure)
(a)Make certain that edges of paint have been feathered using emery cloth (grade 320) and that no paint residue is on rework area.
(b)Clean and degrease repair area with cleaning agent (Mat. No. 11-004).
(c)Cover undamaged area as required, using masking tape and masking paper.
(d)Apply chemical conversion coating (Mat. No. 13-002).
(e)Apply polyurethane primer (Mat. No. 16-001).
(f)Apply top coat (Mat. No. 16-002).
(g)Remove masking tape and masking paper.
(2)Seal Mount and Seal Retainers
(a)Make certain that edges of paint have been feathered using emery cloth (grade 320) and that no paint residue is on rework area.
(b)Clean and degrease repair area with cleaning agent (Mat. No. 11-004).
(c)If bare metal is visible, after cleaning and degreasing, apply chemical conversion coating (Mat. No. 13-002).
(d)Apply polyurethane primer (Mat. No. 16-001).
(e)Apply top coat (Mat. No. 16-002).

D. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Make certain sealant is in good condition and serviceable. Renew sealant if necessary (Ref. 51-76-10, P. Block 801).
(3)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(4)Apply moisture-removing oil (Mat. No. 05-027) thinly to all inner surfaces and structure of emergency exit (Ref. 51-75-10, P. Block 801).
(5)Make certain that drain holes are not blocked.
(6)Apply talcum powder to seal.
(7)Apply sealing grease (Mat. No. 05-001) to seal.
(8)Install insulation and lining.
(9)Install access panels.
(10)Install emergency control handle (Ref. 52-23-22, P. Block 401).
(11)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(12)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(13)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(14)Activate emergency exit door warning system (Ref. 52-23-00, P. Block 301).
(15)Remove rubber mats and supports.
(16)Remove access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand. Only the LH exit is described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B.	Crane, Minimum Capacity 50 kg (110 lb.)
C. 98A52207535001	Sling - Emergency Exit
D. 98A52207607000	Ballast Weight - Emergency Exit, LH
E. 98A52207614000	Ballast Weight - Emergency Exit, RH
F.	Cotter Pins
G.	Corrosion-Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
H.	Rubber Mats
J.	Supports
K. Material No. 04-004	Common Greases (Ref. 20-31-00)
L. Material No. 05-002	Special Materials (Ref. 20-31-00)
M. Material No. 05-027	Special Materials (Ref. 20-31-00)
N. Material No. 05-052	Special Materials (Ref. 20-31-00)
P. Material No. 09-018	Sealants (Ref. 20-31-00)
Q. Material No. 09-019	Sealants (Ref. 20-31-00)
R. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
S. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

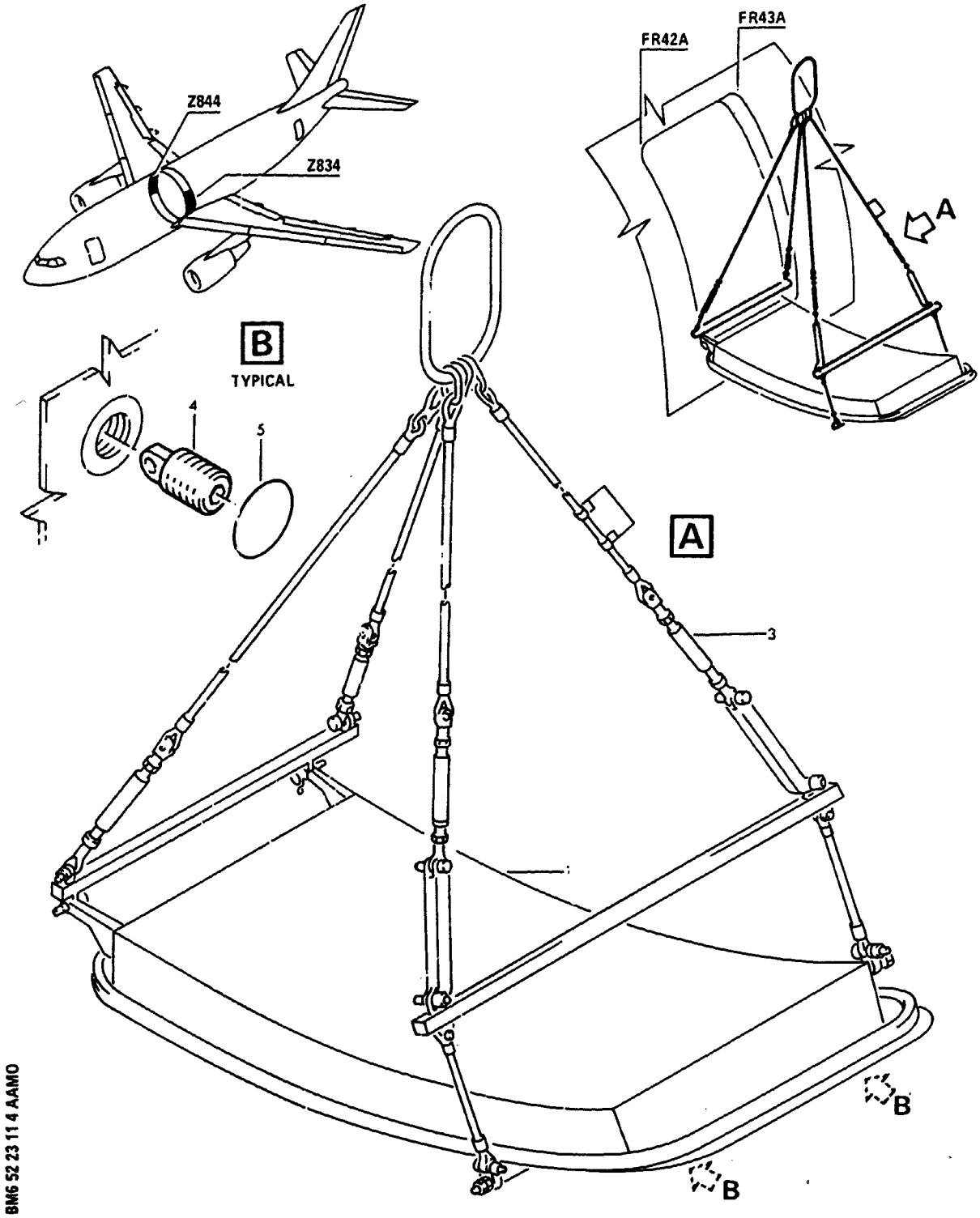
Referenced Procedures

- 11-20-00, P. Block 1	Exterior Placards and Markings
- 20-28-11, P. Block 1	Electrical Bonding
- 25-23-41, P. Block 401	Door Frame Linings
- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-21, P. Block 501	Locking Mechanism
- 52-23-22, P. Block 501	Emergency Escape Slide Release Mechanism
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

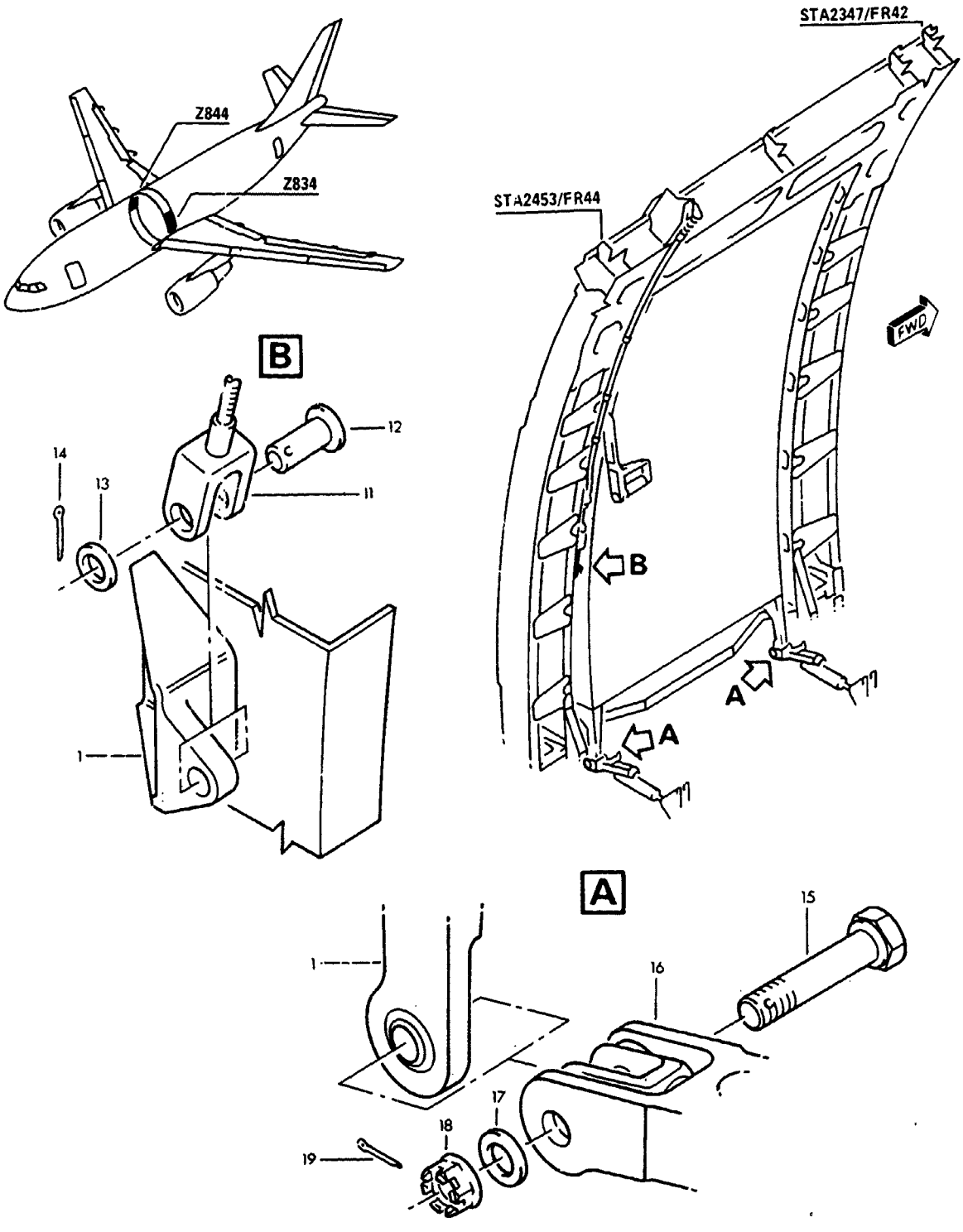
2. Procedure

A. Job Set-Up (Ref. Fig. 401)
(1)Position access platform.
(2)Position supports and rubber mats.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Remove self-adhesive discs (5) covering hoisting points.
(5)Remove hoisting lugs (4) and install in reverse position.
(6)Open emergency exit (1) and lower onto supports (Ref. 52-23-00, P. Block 301).
(7)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(8)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(9)Remove emergency exit fuselage frame linings as required (Ref. 25-23-41, P. Block 401).

B. Removal (Ref. Fig. 402, 403)
(1)Cut and remove lockwire at adjustment screw of support cable assembly. Release tension of support cable (Ref. 52-23-11, P. Block 501).
(2)Disconnect support cable (11).
(a)Remove cotter pin (14), washer (13) and pin (12).
(b)Move support cable (11) clear of emergency exit (1).
(3)Disconnect connector 6010VC-A (6009VC-A) of electrical harness 1710VB/1M (1708VB/1M), between STA2400(FR43) and STA2453(FR44), at floor level.
(4)Disconnect damper cylinders (16) from emergency exit (1).
(a)Remove cotter pins (19), nuts (18), washers (17) and bolts (15).
(b)Move damper cylinders (16) away from emergency exit (1).
(5)Disconnect bonding strap (42) from emergency exit (1).
(a)Remove nut (40), washer (41), bolt (43) and disconnect bonding strap (42) from emergency exit (1).
(6)Disconnect hinge rods (37) from hinge fittings (28).
(a)Remove sealant from nuts (26) and bolts (30).
(b)Remove cotter pins (25), nuts (26) and washers (27).
(c)Remove bolts (30) and washers (29, 32, 33).
NOTE : Record location of bolts (30) and washers (32, 33) and quantity of washers (32, 33) for subsequent installation.
(d)Remove bushes (31, 36) from hinge fittings (28).
(e)Position crane and attach emergency exit sling (3) P/N 98A52207535001.
(f)Remove emergency exit (1) from aircraft.
(g)Lower emergency exit (1) onto suitable support.
(h)Remove emergency exit sling (3).

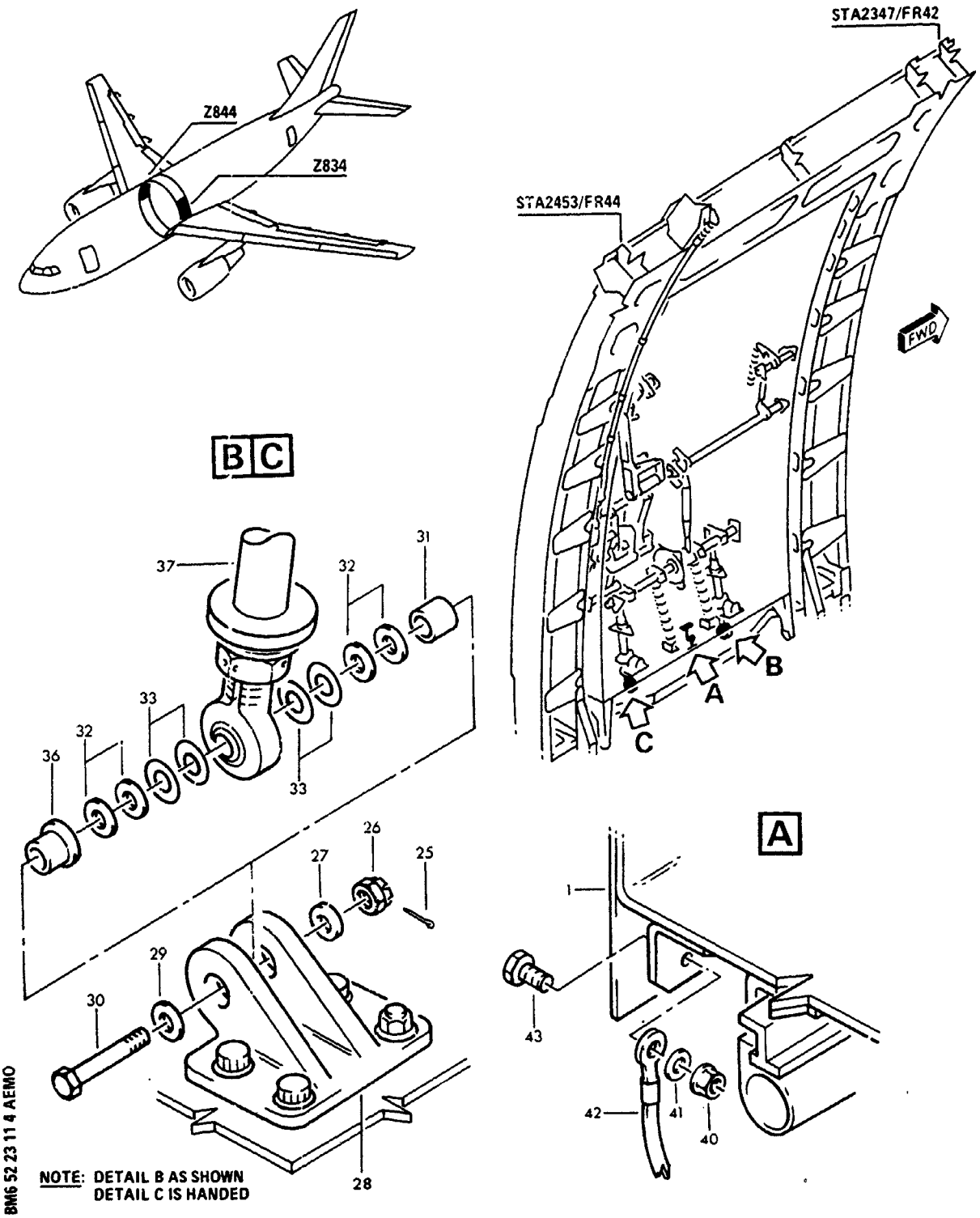


Sling Attachment
Figure 401



BM6 52 23 11 4 ACM 0

Support Cable and Damper Cylinders
Figure 402



Bonding Strap and Hinge Rods
Figure 403

C. Preparation for Installation
(1)Remove damaged sealant and clean all components, except components coated with Polytetrafluoroethylene (PTFE), with cleaning agent (Mat. No. 11-004).
(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).
(3)Unless otherwise stated lubricate all moving parts, except bearings, with grease (Mat. No. 04-004).

D. Installation (Ref. Fig. 401, 402, 403)
(1)Position crane and attach emergency exit sling (3) P/N 98A52207535000.
(2)Position and support emergency exit (1).
(3)Remove sling (3) from emergency exit.
(4)Connect hinge rods (37).
(a)Install bushes (31, 36) in hinge fittings (28).
(b)Position washers (32, 33) and hinge rods (37).
(c)Position washers (29) and install bolts (30), washers (27) and nuts (26).
NOTE : After adjustment/test of emergency exit (1), bolts (30) must be removed and sealant (Mat. No. 09-018) applied to plain shanks (Ref. 51-76-10, P. Block 801).
Bolts (30) must then be reinstalled and nuts (26) safetied with cotter pins (25).
(5)Install ballast weight P/N 98A52207607000 (P/N 98A52207614000).
(6)Connect damper cylinders (16) to emergency exit (1).
(a)Position damper cylinders (16).
(b)Install bolts (15), washers (17) and nuts (18).
(c)Safety nuts (18) with cotter pins (19).
(7)Connect support cable (11) to emergency exit (1).
(a)Position support cable (11), install pin (12) and washer (13).
(b)Safety pin (12) with cotter pin (14).
(8)Adjust damper cylinders (16) and support cable (11) (Ref. 52-23-11, P. Block 501).
(9)Connect bonding strap (42).
(a)Position bonding strap (42) and install bolt (43), washer (41) and nut (40). For electrical bonding refer to 20-28-11, P. Block 1.
(10)Connect connector 6010VC-A (6009VC-A) of electrical harness 1710VB/1M (1708VB/1M), between STA2400(FR43) and STA2453(FR44), at floor level.

E. Test
(1)Carry out the following adjustment/test procedures:
(a)Emergency exit (Ref. 52-23-11, P. Block 501).
(b)Emergency exit locking mechanism (Ref. 52-23-21, P. Block 501).
(c)Emergency escape slide release mechanism (Ref. 52-23-22, P. Block 501).
(d)Exit warning (Ref. 52-71-11, P. Block 501).
(e)Emergency escape slide release warning (Ref. 52-73-13, P. Block 501).

F. Close-Up (Ref. Fig. 401, 403)
(1)Open emergency exit (1) (Ref. 52-23-00, P. Block 301).
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Cover nuts (26) and heads of bolts (30) with sealant (Mat. No. 09-019) (Ref. 51-76-10, P. Block 801) (Ref. Fig. 403).
(4)Safety adjustment screw of support cable assembly with lockwire.
(5)Remove ballast weight.
(6)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(7)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and apply if necessary (Ref. 51-75-10, P. Block 801).
(8)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(9)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(10)Install emergency exit fuselage frame lining (Ref. 25-23-41, P. Block 401).
(11)Close emergency exit (1) (Ref. 52-23-00, P. Block 301).
(12)Remove hoisting lugs (4) and degrease with cleaning agent (Mat. No. 11-004).
(13)Apply corrosion-preventive paste (Mat. No. 05-002) to hoisting lugs (4) and install in emergency exit (1) flush with skin.
(14)Install self-adhesive discs (5) (Mat. No. 05-052) over hoisting points (Ref. 11-20-00, P. Block 1).
(15)Remove supports and rubber mats.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(16)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(17)Remove access platform and crane.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : Damaged sealant must be removed from fittings and emergency exit fuselage frame using cleaning agent (Mat. No. 11-004). After adjustment/test procedure has been carried out, a sealant bead (Mat. No. 09-019) must be formed between all emergency exit fuselage frame fittings, except stop fittings, and structure (Ref. 51-76-10, P. Block 801).

NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand. The LH exit only is described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D.	Corrosion-Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
E.	Cotter Pins
F.	Lockwashers
G.	Nonmetallic Scraper
H.	Rubber Mats
J.	Supports
K.	Torque Wrench up to 2.5 m.daN (221.3 lbf.in.)
L. Material No. 05-002	Special Materials (Ref. 20-31-00)
M. Material No. 05-027	Special Materials (Ref. 20-31-00)
N. Material No. 08-007	Bonding and Adhesive Compounds (Ref. 20-31-00)
P. Material No. 09-005	Sealants (Ref. 20-31-00)
Q. Material No. 09-018	Sealants (Ref. 20-31-00)
R. Material No. 09-019	Sealants (Ref. 20-31-00)
S. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 25-23-41, P. Block 401	Door Frame Linings
- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-21, P. Block 401	Locking Mechanism
- 52-23-21, P. Block 501	Locking Mechanism
- 52-23-22, P. Block 501	Emergency Escape Slide Release Mechanism
- 52-23-31, P. Block 401	Fittings
- 52-71-11, P. Block 501	Door Warning Switches
- 53-10-25, P. Block 401	Passenger Compartment Floor Panels

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Remove emergency exit fuselage frame linings as required (Ref. 25-23-41, P. Block 401).
(8)Install emergency exit ballast weight P/N 98A52207607000 (98A52207614000).
(9)Make certain that emergency exit locking mechanism is correctly adjusted (Ref. 52-23-21, P. Block 501).
(10)Make certain that emergency escape slide release mechanism is correctly adjusted (Ref. 52-23-22, P. Block 501).
(11)Close emergency exit (Ref. 52-23-00, P. Block 301).

B. Adjustment of Emergency Exit to Fuselage Gaps
(Ref. Fig. 501, 502, 505)
(1)Check that gap 'a', between emergency exit frame and emergency exit fuselage frame, is 70.0 ± 1.5 mm (2.76 ± 0.06 in.).
(2)Check that gap 'b', between fuselage skin and emergency exit skin, is
R 5.0 ± 2.0 mm (0.2 ± 0.08 in.).
(3)Check that gap 'c', between yoke (13) and guide (14) of hinge rod swivel coupling at aft hinge rod (1), is not less than 0.2 mm (0.008 in.) over full range of exit movement.

** ON DOOR SERIAL NO. 1002 - 1096

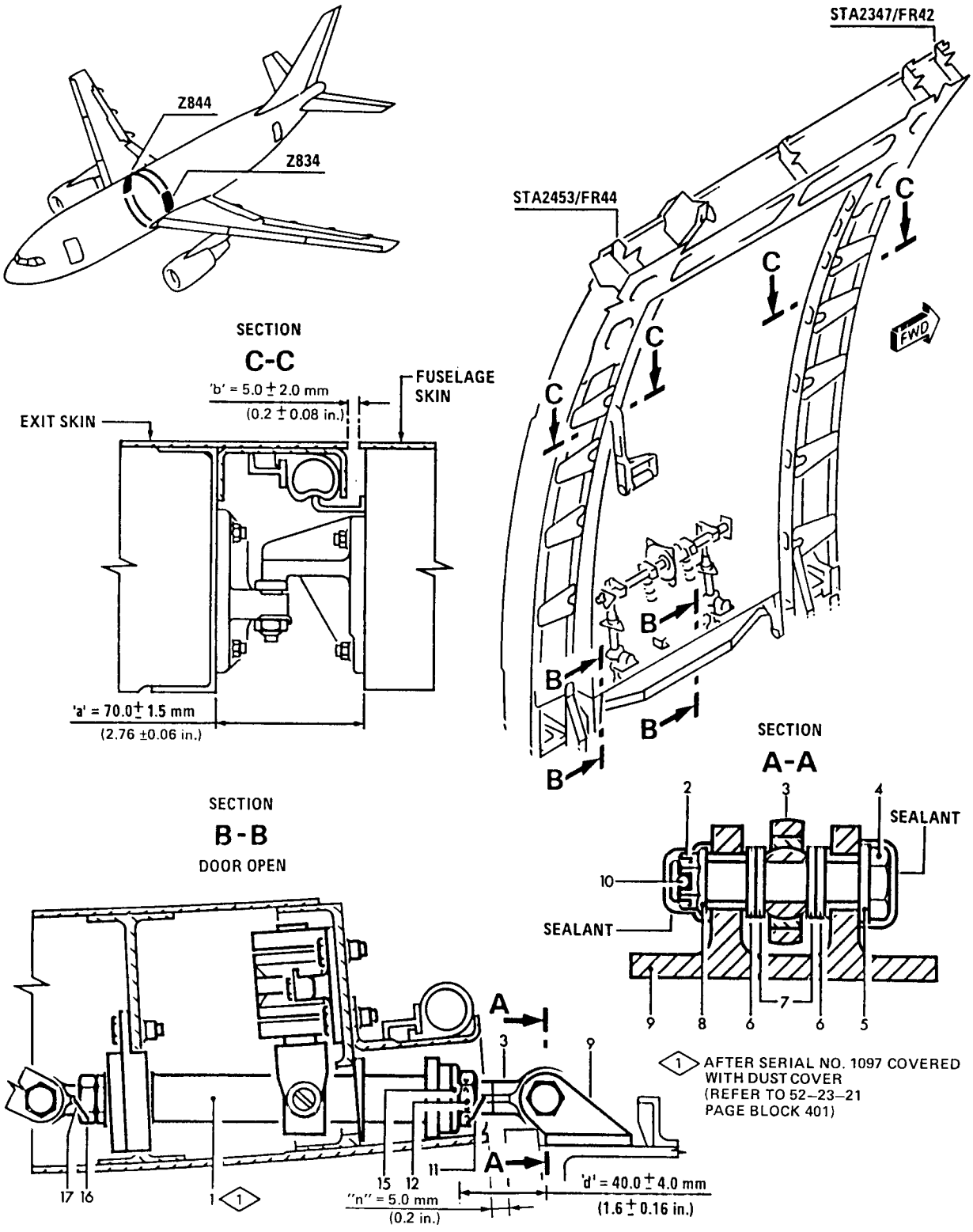
(a)Not applicable

** ON DOOR SERIAL NO. 1097 AND SUBSEQUENT

(a)Remove cable tie and draw back rubber cover to gain access to bearing (Ref. 52-23-21, P. Block 401).

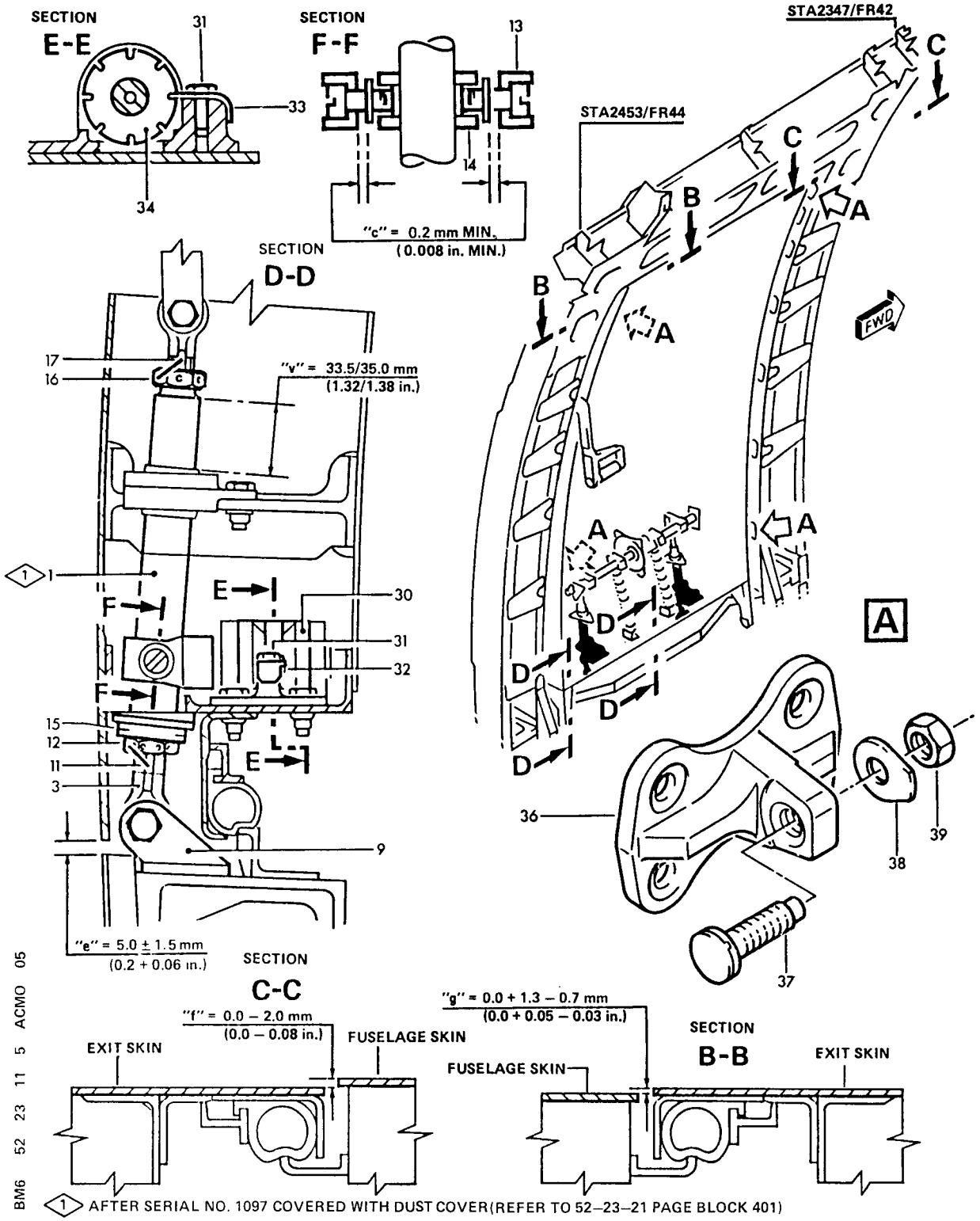
** ON ALL DOORS

(4)Should gaps 'a', 'b' and/or 'c' exceed stated limits, position of hinge rod (1) must be adjusted as follows:
(a)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(b)Remove sealant from nut (2) and head of bolt (4).
(c)Remove cotter pin (10), nut (2) and washer (8).
(d)Remove bolt (4) and washer (5). Record location of bolt (4) for subsequent installation.



Emergency Exit
Figure 501

R


SECTION E-E
SECTION F-F
"c" = 0.2 mm MIN. (0.008 in. MIN.)
SECTION D-D
"v" = 33.5/35.0 mm (1.32/1.38 in.)
"e" = 5.0 ± 1.5 mm (0.2 + 0.06 in.)
SECTION C-C
"f" = 0.0 – 2.0 mm (0.0 – 0.08 in.)
EXIT SKIN
FUSELAGE SKIN
"g" = 0.0 + 1.3 – 0.7 mm (0.0 + 0.05 – 0.03 in.)
SECTION B-B
STA2347/FR42
STA2453/FR44
FWD
BM6 52 23 11 5 ACMO 05
1 AFTER SERIAL NO. 1097 COVERED WITH DUST COVER(REFER TO 52–23–21 PAGE BLOCK 401)

Emergency Exit
Figure 502

R

(e)Reposition washer (6 or 7), in relation to eye-end (3), on bolt (4), as required.
(f)Remove damaged sealant from nut (2) and bolt (4) using nonmetallic scraper and cleaning agent (Mat. No. 11-004).
(g)Apply sealant (Mat. No. 09-018) to plain shank of bolt (4) (Ref. 51-76-10, P. Block 801).
NOTE : Do not apply sealant (Mat. No. 09-018) to bolt (4) until step (5) has been completed.
(h)Position washer (5) and install bolt (4) as previously recorded.
(j)Install washer (8), nut (2) and safety with cotter pin (10).
(k)Close emergency exit (Ref. 52-23-00, P. Block 301).
(5)Check that gap 'e', between lower edge of emergency exit exterior skin and fuselage skin at emergency exit threshold, is 5.0 ±1.50 mm (0.2 ±0.06 in.).

R ** ON DOOR SERIAL NO. 1002 - 1096

(6)Check that distance 'v', between top of bearing and top edge of hinge rod (1), is between 33.5 and 35.0 mm (1.32 and 1.38 in.) and that seal at lower end of hinge rod (1) is compressed.

R ** ON DOOR SERIAL NO. 1097 AND SUBSEQENT

R (6)Not applicable.
(7)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(8)Check that gap 'n', between lower edge of emergency exit and fuselage skin, is not less than 5.0 mm (0.2 in.).
(9)Should stated limits be exceeded; for gaps 'e' and/or 'n'; for distance 'v' or seal not be compressed proceed as follows:
(a)Cut and remove lockwire (11, 17) from locknuts (12, 16).
(b)Loosen locknuts (12, 16).
(c)Adjust length of hinge rod (1), as required.
(d)Tighten locknuts (12, 16) and make certain that distance 'd', between center of eye-end (3) and surface of sealing ring (15) where lock-nut (12) contacts sealing ring (15), is 40.0 ± 4.0 mm (1.6 ± 0.16 in.). Should stated limits be exceeded, adjust eye-end as follows:
1 Remove sealant from nut (2) and head of bolt (4).
2 Remove cotter pin (10), nut (2) and washer (8).
3 Remove bolt (4) and washer (5). Record location of bolt (4) for sub-sequent installation.
4 Remove washers (6, 7). Record location of washer (6, 7) for subsequent installation.
5 Move eye-end (3) away from hinge fittings (9).
6 Loosen locknut (12) and adjust eye-end (3) and hinge rod (1), as required.
7 Tighten locknut (12).
8 Remove damaged sealant from nut (2) and bolt (4) using nonmetallic scraper and cleaning agent (Mat. No. 11-004).
9 Apply sealant (Mat. No. 09-018) to plain shank of bolt (4) (Ref. 51-76-10, P. Block 801).
10 Position hinge rod (1) and washers (6, 7) as previously recorded.

11 Position washer (5) and install bolt (4) as previously recorded.
12 Install washer (8) and nut (2).
13 Close emergency exit (Ref. 52-23-00, P. Block 301).

(10)Check that gaps 'a', 'b', 'c', 'e' and 'n' are within stated limits. Repeat steps (1) thru (8), if necessary.
(11)Open emergency exit (Ref. 52-23-00, P. Block 301).
(12)Make certain that bolt (4) has been installed with sealant applied.
(13)Safety nut (2) with cotter pin (10).
(14)Safety locknuts (12, 16) with lockwire (11, 17).
(15)Cover nut (2) and head of bolt (4) with sealant (Mat. No. 09-019) (Ref. 51-76-10, P. Block 801).
(16)Close emergency exit (Ref. 52-23-00, P. Block 301).

** ON DOOR SERIAL NO. 1002-1096

(17)Not applicable

** ON DOOR SERIAL NO. 1097 AND SUBSEQUENT

(17)Reposition rubber cover and install cable tie (Ref. 52-23-21, P. Block 401).

C. Adjustment of Skin Offset
(Ref. Fig. 501, 502)

(1) Make certain that emergency exit is adjusted as described in Para. B.
(2) Check that emergency exit skin is flush with fuselage skin contour at emergency exit threshold. Adjust emergency exit lower edge skin offset, if necessary, as follows:
  (a) Cut and remove lockwire (32) from bolt (31) at adjuster (30).
  (b) Remove bolt (31) and locking plate (33).
  (c) Adjust skin offset by rotating adjusting ring (34).
  (d) Position locking plate (33) and install bolt (31).
(3) Check that skin offset 'f', adjacent to upper stop fittings at FR42A, is between 0.0 and -2.0 mm (0.0 and -0.08 in.).
(4) Check that skin offset 'g', adjacent to upper stop fittings at FR43A, is between 0.0+1,3 and -0.7mm (0.05 and -0.03 in.).
(5) Should stated limits for skin offset 'f' and/or 'g' be exceeded, adjust upper stop fittings (36) as follows:
  (a) Release lockwasher (38), remove nut (39), remove and discard lockwasher (38).
  (b) Position new lockwasher (38) and install nut (39).
  (c) Adjust screw (37) until skin offset 'f' and/or 'g' is within stated limits.
  (d) Tighten nut (39).
(6) Repeat steps 2.C. (2) (b) thru (5) (d), if necessary.
(7) Carry out adjustment of all stop fittings (Ref. Para. D.).
(8) Safety bolt (31) at adjuster (30) with lockwire (32).
(9) TORQUE nut (39) of upper stop fitting (36) to between 2.0 and 2.2 m.daN (177.0 and 194.7 lbf.in.).
(10) Safety nuts (39) with lockwashers (38).

D. Adjustment of Stop Fittings
(Ref. Fig. 502, 503)

(1) Make certain that emergency exit is adjusted as described in Para. B. and C.

(2) Make certain that upper and lower pairs of stop fittings (36, 49) are in contact. If upper and lower pairs of stop fittings (36, 49) are not in contact, proceed as follows:

(a) Release lockwasher (38).

(b) Remove nut (39) and lockwasher (38).

(c) Adjust screw (37) until screw (37) just contacts emergency exit fuselage frame stop fitting (49).

(d) Install new lockwasher (38) and nut (39).

(3) Check that clearance 'h', between screw (46) of emergency exit frame stop fitting (50) and emergency exit fuselage frame stop fitting (49), is not more than 0.5 mm (0.02 in.).

(4) Should stated limit be exceeded, emergency exit frame stop fitting (50) must be adjusted as follows:

(a) Release lockwasher (47).

(b) Remove nut (48) and lockwasher (47).

(c) Adjust screw (46) until gap 'h' is within stated limit. If gap 'h' cannot be adjusted, emergency exit fuselage frame fittings must be adjusted.

(5) Make certain that distance 'j', between contact surface of screws (37, 46) and emergency exit frame stop fittings (36, 50), is not more than 6.0 mm (0.24 in.). If distance 'j' exceeds stated limit, emergency exit fuselage frame fittings must be adjusted.

(6) Check that overlap 'k', between screws (37, 46) and contact surface of emergency exit fuselage frame stop fitting (49), is between 11.0 and 14.0 mm (0.4 and 0.6 in.). Should stated limits be exceeded, hinge rods must be adjusted (Ref. Para. B.).

(7) Make certain that screws (37, 46) of emergency exit frame stop fittings (36, 50) contact emergency exit fuselage frame stop fitting (49) on horizontal centerline of contact area of emergency exit fuselage frame stop fitting (49). Tolerance of screws must be 0 ±1 mm (0 ±0.04 in.). If this tolerance is exceeded, adjust hinge rods (Ref. Para. B. (9)).

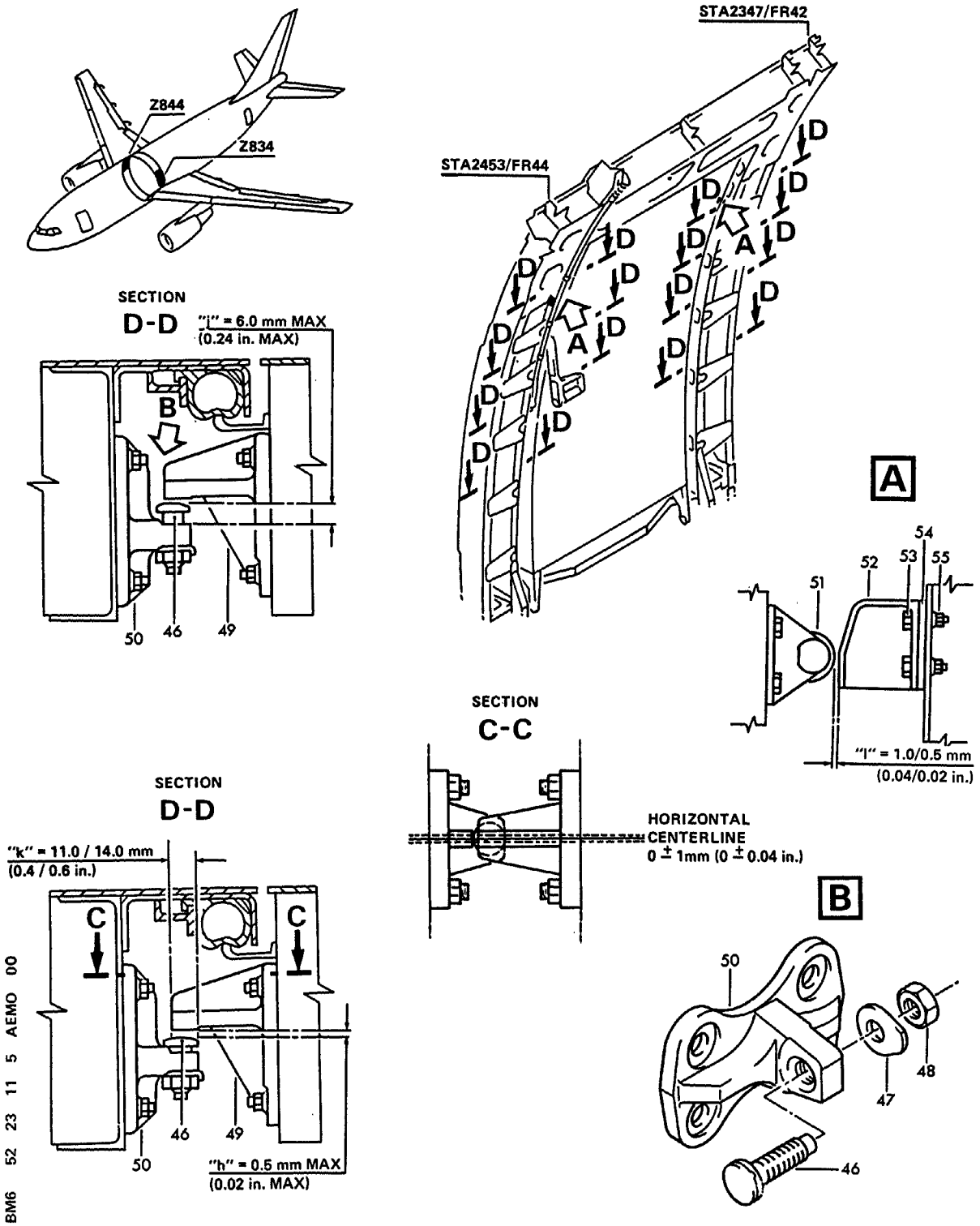
(8) Install new lockwasher (47) and nut (48).

(9) TORQUE nut (48) to between 2.0 and 2.2 m.daN (177.0 and 194.7 lbf.in.).

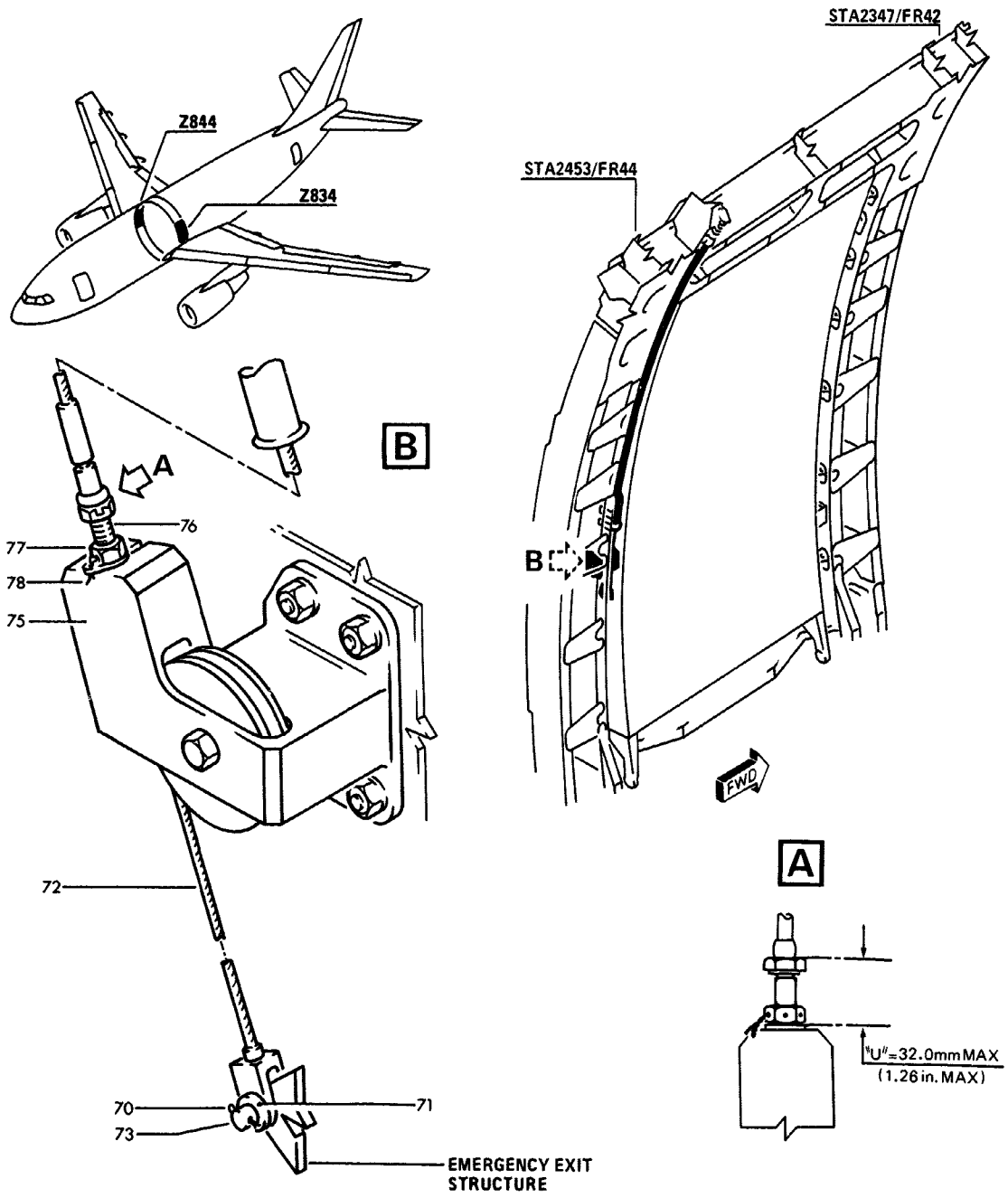
(10) Safety nuts (39, 48) with lockwashers (38, 47).

E. Adjustment of Centering Fitting
(Ref. Fig. 503)
(1)Make certain that emergency exit is adjusted as described in Para. B. thru D.
(2)Check that gap 'l', between centering roller (51) and centering fitting (52), is between 1.0 and 0.5 mm (0.04 and 0.02 in.).
NOTE : One centering roller and fitting may be in contact.
(3)Should stated limits be exceeded, proceed as follows:
(a)Open emergency exit (Ref. 52-23-00, P. Block 301).
(b)Remove nuts (55), bolts (53) and centering fitting (52).
(c)Install or remove shims (54) as required.
(d)Position centering fitting (52), install bolts (53) and nuts (55).
(e)Close emergency exit (Ref. 52-23-00, P. Block 301).
(f)Check that gap 'l', between centering roller (51) and centering fitting (52), is within stated limits. Repeat steps (a) thru (d), if necessary.

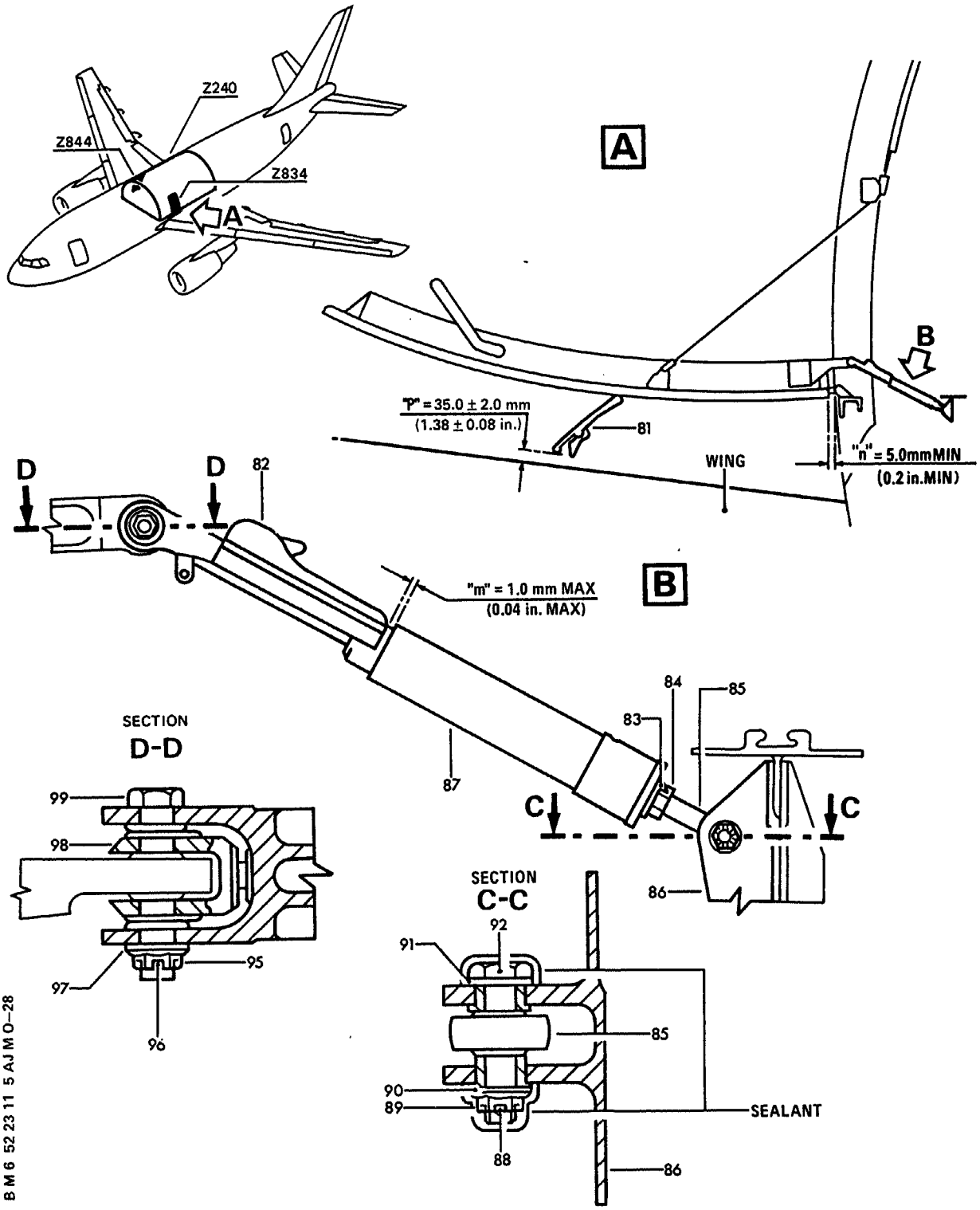
F. Adjustment of Damper Cylinder and Support Cable
(Ref. Fig. 504, 505)
(1)Make certain that emergency exit is adjusted as described in Para. B. thru E.
(2)Using exterior control handle (81), open emergency exit.
(3)With exterior control handle (81) in open position and exit supported by support cable check that gap 'p', between exterior control handle (81) and wing, is 35.0 ±2.0 mm (1.38 ±0.08 in.). Should stated limit be exceeded, proceed as follows:
(a)Cut and remove lockwire (78) from locknut (77) at support cable assembly (75).
(b)Adjust screw (76) as required. If gap 'p' cannot be adjusted to stated limit, support cable must be replaced (Ref. 52-23-31, P. Block 401).
(c)Safety locknut (77) with lockwire (78).
(d)Check that distance 'u', between head of screw (76) and support cable assembly (75), is not more than 32.0 mm (1.26 in.). Should stated limit be exceeded, support cable (72) must be replaced (Ref. 52-23-31, P. Block 401).



Emergency Exit
Figure 503



Support Cable Assembly
Figure 504



Emergency Exit
Figure 505

(4)Check that locking latch (82) of damper cylinder (87) is engaged and that gap 'm', between end of latch (82) and body of damper cylinder (87) is not more than 1.0 mm (0.04 in.). Should stated limit be exceeded, or latch (82) not be engaged, proceed as follows:
  (a)Remove cotter pin (96), nut (95), washer (97) and bolt (99).
  (b)Move damper cylinder away from emergency exit.
  (c)Make certain that piston is fully extended.
  (d)Adjust fork-end (98), as required.
  (e)Position damper cylinder (87).
  (f)Install bolt (99), washer (97) and nut (95).
  (g)Safety nut (95) with cotter pin (96).
(5)Adjust overall length of damper cylinder as follows:
  (a)Remove floor panel (Ref. 53-10-25, P. Block 401).
  (b)Remove sealant from nut (89) and head of bolt (92).
  (c)Remove cotter pin (88), nut (89) and washer (90).
  (d)Remove bolt (92) and washer (91).
  (e)Release tabwasher (83) and locknut (84).
  (f)Move damper cylinder (87) away from attach fitting (86).
  (g)Unscrew eye-end (85), remove and discard tabwasher (83).
    NOTE : Make certain that bushes in attach fitting (86) are retained in position.
  (h)Position new tabwasher (83) and install eye-end (85).
  (j)With damper cylinder fully extended, and emergency exit weight supported by support cable, adjust eye-end (85) of damper cylinder (87) until bolt (92) can be easily installed.
  (k)Tighten locknut (84) and safety with tabwasher (83).
  (l)Remove damaged sealant from nut (89), head of bolt (92) and attach fitting (86) using cleaning agent (Mat. No. 11-004).
  (m)Apply sealant (Mat. No. 09-018) to plain shank of bolt (92) (Ref. 51-76-10, P. Block 801).
  (n)Position damper cylinder (87) and washer (91). Make certain bushes in attach fitting (86) are in position.
  (p)Install bolt (92), washer (90) and nut (89).
  (q)Safety nut (89) with cotter pin (88).
  (r)Cover nut (89) and head of bolt (92) with sealant (Mat. No. 09-019) (Ref. 51-76-10, P. Block 801).
(6)Check that gap 'm', between end of latch (82) and body of damper cylinder (87), is not more than 1.0 mm (0.04 in.). Should stated limit be exceeded, proceed as follows:
  (a)Remove cotter pin (96), nut (95), washer (97) and bolt (99).
  (b)Adjust fork-end (98), as required, until gap 'm' is within stated limit.
  (c)Position damper cylinder fork-end (98) and install bolt (99).
  (d)Install washer (97) and nut (95).
  (e)Safety nut (95) with cotter pin (96).
(7)Close emergency exit (Ref. 52-23-00, P. Block 301).

G. Adjustment of Guide Fittings and Lowering Stop
(Ref. Fig. 506)

(1)Make certain that emergency exit is adjusted as described in Para. B. thru F.

(2)Check that gap 'q', between rollers (114, 118) and outboard edge of guide fittings (112, 117), is not less than 0.2 mm (0.008 in.). Should stated limit be exceeded, guide fittings (112, 117) must be adjusted as follows:
  (a)Open emergency exit (Ref. 52-23-00, P. Block 301).
  (b)Loosen nuts (113, 119) and move guide fittings (112, 117) inboard or outboard on serrated plates (110, 111, 115, 116), as required, until gap 'q' is within stated limit.
  (c)Tighten nuts (113, 119).
  (d)Close emergency exit (Ref. 52-23-00, P. Block 301).

(3)Check that gap 'r', between roller (118) and lower edge of lower guide fitting (117), is 3.0 ± 0.5 mm (0.12 ± 0.02 in.). Should stated limits be exceeded, proceed as follows:
  (a)Open emergency exit (Ref. 52-23-00, P. Block 301).
  (b)Loosen nuts (119) and raise or lower guide fitting (117) on serrated plates (115, 116), as required, until gap 'r' is within stated limits.
  (c)Tighten nuts (119).

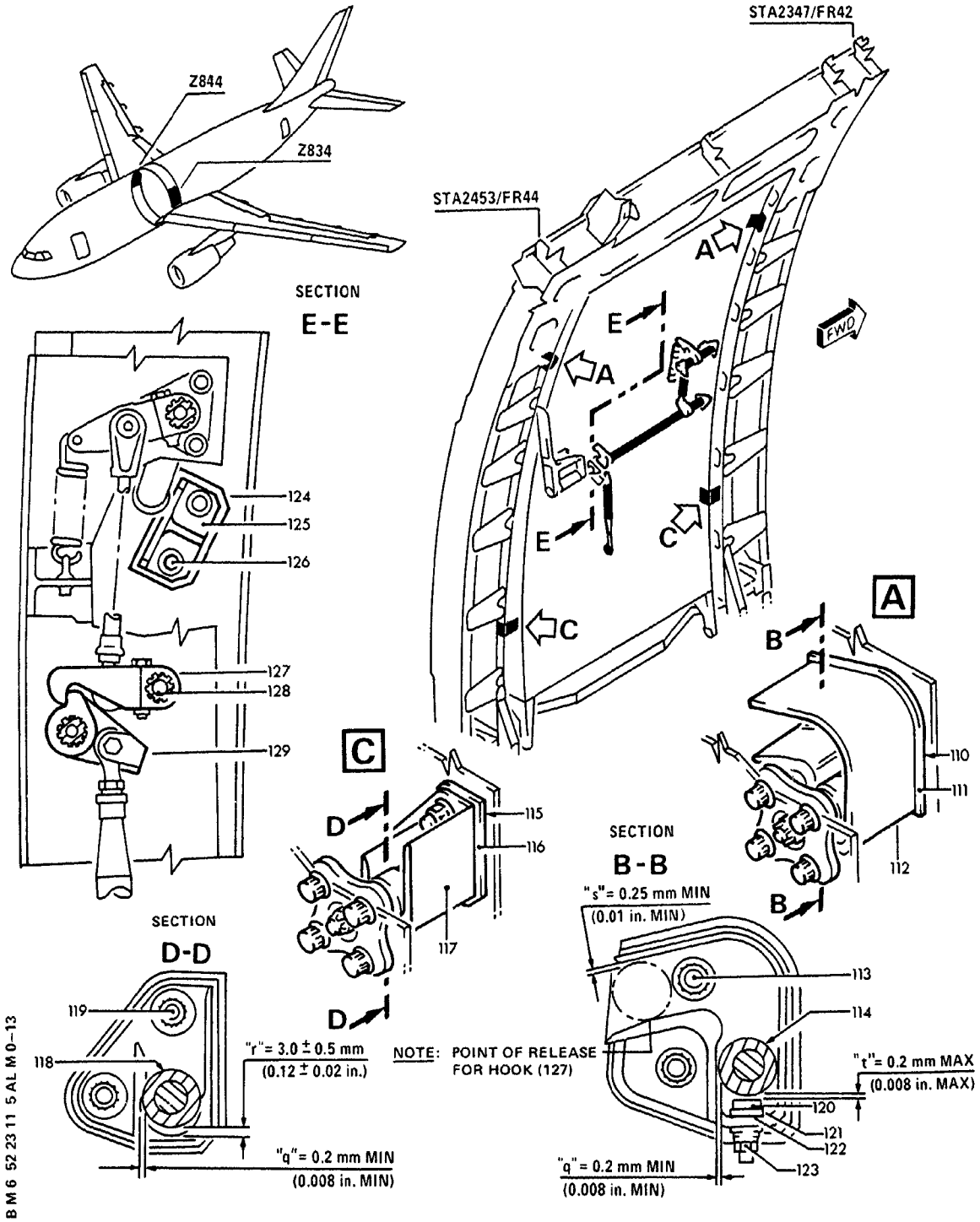
(4)Close emergency exit (Ref. 52-23-00, P. Block 301).

(5)Check that gap 's', between top of roller (114) and top edge of guide fitting (112), is not less than 0.25 mm (0.01 in.) as guide roller (114) enters guide fitting (112). Should stated limit be exceeded, proceed as follows:
  (a)Open emergency exit (Ref. 52-23-00, P. Block 301).
  (b)Loosen nuts (113) and raise or lower guide fitting (112) on serrated plates (110, 111), as required, until gap 's' is within stated limit.
  (c)Tighten nuts (113).
  (d)Close emergency exit (Ref. 52-23-00, P. Block 301).

(6)Check that gap 't', between roller (114) and stop (120) of upper guide fitting (112) is not more than 0.2 mm (0.008 in.). Should stated limit be exceeded, proceed as follows:
  (a)Open emergency exit (Ref. 52-23-00, P. Block 301).
  (b)Remove nut (123), stop (120), washer (121) and shimwasher (122).
  (c)Add or remove shimwashers (122), as required.
  (d)Position shimwashers (122), washer (121) and install stop (120) and nut (123).

(7)Close emergency exit (Ref. 52-23-00, P. Block 301).
  (a)Check that hook (127) on lower lowering shaft (128) disengages cam (129) as roller (114) enters upper guide fitting (112).

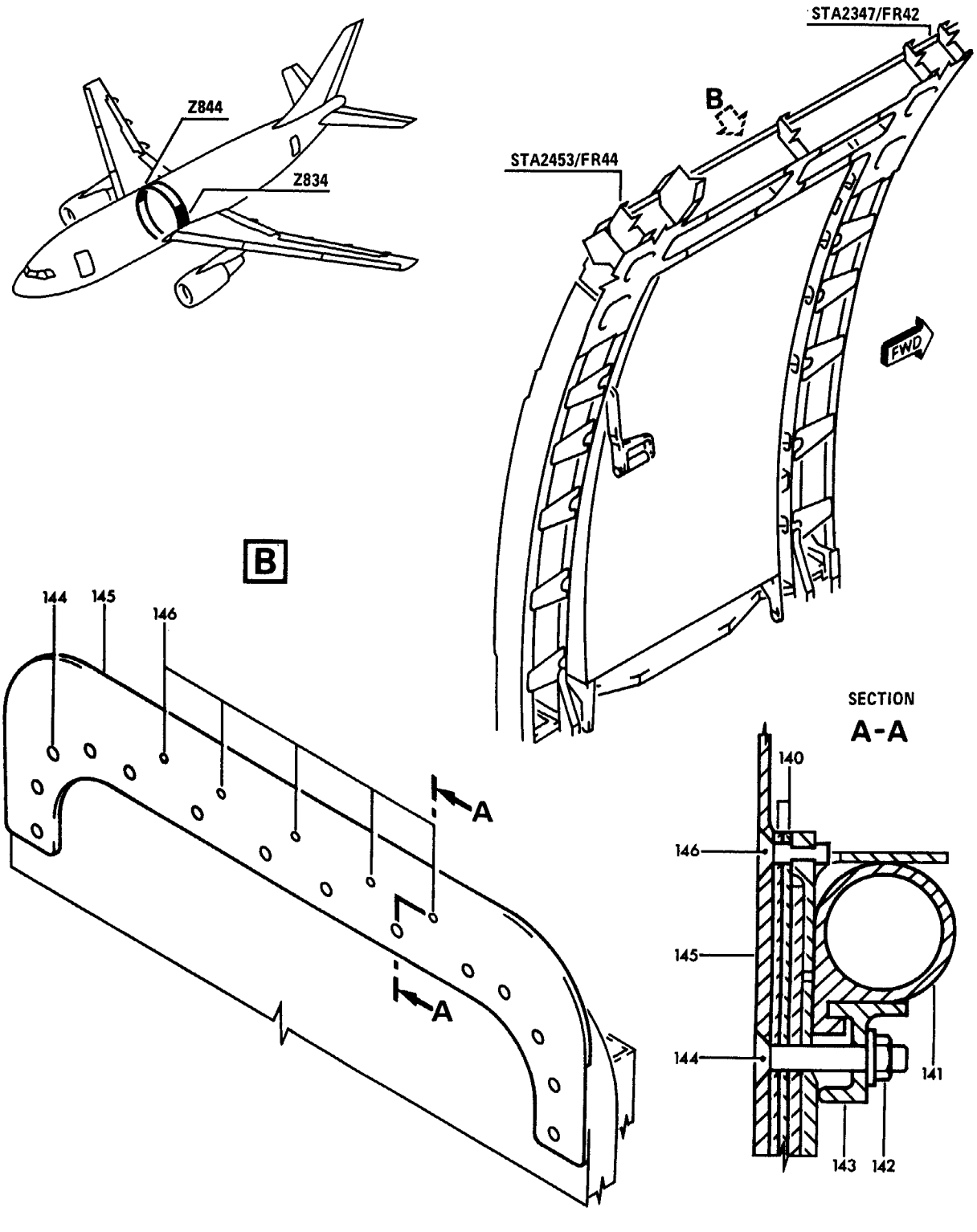
(8)If hook (127) does not disengage cam (129), proceed as follows:
  (a)Loosen nuts (126) securing lowering stop (125) on fwd emergency exit fuselage frame.
  (b)Adjust lowering stop fitting (125) on serrated plate (124) as required.
  (c)Tighten nuts (126).



Emergency Exit
Figure 506

H. Adjustment of Cover Plate
(Ref. Fig. 507)
(1)Make certain that emergency exit is adjusted as described in Para. B. thru G.
(2)Check that cover plate (145), at top of emergency exit, is flush with fuselage contour.
(3)If cover plate (145) is not flush with fuselage contour, proceed as follows:
(a)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(b)Remove screws (146) from cover plate (145).
(c)Remove nuts (142), bolts (144) and retainers (143).
(d)Remove cover plate (145) and shims (140).
(e)Remove damaged sealant from cover plate (145), shims (140) and fuselage external skin using nonmetallic scraper and cleaning agent (Mat. No. 11-004).
(f)Add or remove shims (140), as required.
(g)Apply sealant (Mat. No. 09-005) to shims (140) and emergency exit outer skin in area of cover plate (145) (Ref. 51-76-10, P. Block 801).
(h)Apply corrosion-preventive paste (Mat. No. 05-002) to plain shank of bolts (144).
(j)Position shims (140) and cover plate (145).
(k)Insert bolts (144).
(l)Apply thread-locking compound (Mat. No. 08-007) to thread of screws (146).
(m)Install screws (146).
(n)Position retainers (143) and install nuts (142).
NOTE : Make certain that seal (141) has not been deformed after tightening nuts (142).
(p)Close emergency exit (Ref. 52-23-00, P. Block 301).

J. Test
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(1)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(2)Open and close emergency exit several times (Ref. 52-23-00, P. Block 301). Check that emergency exit operates smoothly and that warning system operates correctly.
(a)For adjustment/test of emergency exit warning system refer to 52-71-11, P. Block 501.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).



Cover Plate
Figure 507

K. Close-Up
(1)Open emergency exit (Ref. 52-23-00, P. Block 301).
(2)Make certain that all protruding thread ends are covered with corrosion-preventive paste (Mat. No. 05-002).
(3)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(4)Remove emergency exit ballast weight.
(5)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and apply if necessary (Ref. 51-75-10, P. Block 801).
(6)Install emergency exit fuselage frame linings (Ref. 25-23-41, P. Block 401).
(7)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(8)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(9)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(10)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(11)Remove rubber mats and supports.
(12)Remove access platform.

3. Functional Test

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand. The LH exit only is described and illustrated.

A. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 3.80 m (12.50 ft.)
(2)	Spring Balance up to 25.0 daN (56 lbf.)
(3)	Rubber Mats
(4)Material No. 05-001	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 25-61-23, P. Block 401	Overwing Escape Slide
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-14, P. Block 401	Damper Cylinder
- 52-23-21, P. Block 501	Locking Mechanism
- 52-23-22, P. Block 501	Emergency Escape Slide Release Mechanism

B. Procedure

(1)Job Set-Up

(a)Position access platform.

(b)Position rubber mats.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(c)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).

(d)Open emergency exit (Ref. 52-23-00, P. Block 301).

(e)Apply sealing grease (Mat. No. 05-001) to emergency exit seal.

(f)Close emergency exit (Ref. 52-23-00, P. Block 301).

R (2)Functional Test of Emergency Exit (Ref. Fig. 508).

ACTION	RESULT
1. Check force required to operate interior control handle.	
- Attach spring balance to interior control handle.	Force required to move interior control handle to open position and back to closed position must not exceed 20.0 daN (45.0 lbf.).
- Should stated limit be exceeded, inspect locking mechanism and/or fittings and adjust if necessary (Ref. 52-23-21, P. Block 501).	
- Remove spring balance from interior control handle.	
2. Check force required to operate exterior control handle.	
- Attach spring balance to exterior control handle.	Force required to move exterior control handle to open position must not exceed 20.0 daN (45.0 lbf.).
- Should stated limit be exceeded, inspect locking mechanism and/or fittings and adjust if necessary (Ref. 52-23-21, P. Block 501).	
- Remove spring balance from exterior control handle.	
- Close exterior control handle.	
3. Check force required to operate emergency control handle.	
WARNING : DO NOT OPEN EXIT.	
- Remove emergency control handle safety pin. Do not open exit.	
- Attach spring balance to emergency control handle.	Force required to move emergency control handle to ARMED and back to DISARMED position must not exceed 5.0 daN (11.0 lbf.).

ACTION	RESULT
- Should stated limit be exceeded, inspect escape slide mechanism and adjust if necessary (Ref. 52-23-22, P. Block 501). - Install emergency control handle safety pin. - Remove spring balance from emergency control handle.	
4. Check locking indication.	
- Open exterior control handle.	
- Slowly move interior control handle towards closed position.	Exterior control handle returns to closed position, **LOCKED** is visible in aperture of locking indicator.
- Adjust locking mechanism if necessary (Ref. 52-23-21, P. Block 501).	
R - Move interior control handle to a point 6.5 mm (0.26 in.) from lower interior control handle R stop using a gage for measurement R the distance.	Dividing line between red and green sectors of locking indicator is visible in aperture of locking indicator.
- If dividing line is not visible in aperture, inspect emergency exit locking mechanism and adjust if necessary (Ref. 52-23-21, P. Block 501).	
5. Check locking mechanism adjustment.	
- Draw a horizontal line on emergency exit and adjacent to fuselage skin using a soft pencil.	
- Raise interior control handle to fully open position and measure distance between pencil mark on emergency exit and fuselage skin.	Emergency exit is raised not less than 31 mm (1.2 in.).
- Should stated limit be exceeded, inspect emergency exit locking mechanism and adjust if necessary (Ref. 52-23-21, P. Block 501).	
6. Check damper cylinders.	
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.	
- Open emergency exit (Ref. 52-23-00, P. Block 301).	Descent must be between 2.0 and 7.0 sec.

ACTION	RESULT
- If stated limit is exceeded, damper cylinders must be replaced (Ref. 52-23-14, P. Block 401).	
- Check damper cylinder lock.	Damper cylinder must lock when in open position.
- If damper cylinder does not lock in open position, adjust as necessary (Ref. Para. 2.F.).	
- Check indicator.	Blue indicator must be visible in window at lower end of damper cylinder.
- If indicator is not visible, damper cylinder must be replaced (Ref. 52-23-14, P. Block 401).	
7. Check interior control handle locking with door in open position.	
	Interior control handle cannot be moved towards closed position.
- If interior control handle can be moved towards closed position, inspect emergency exit locking mechanism and adjust as necessary (Ref. 52-23-21, P. Block 501).	
8. Check emergency control handle with door in open position.	
- Make certain emergency escape slide cylinder pressure cannot be released (Ref. 25-61-23, P. Block 401).	
- Remove emergency control handle safety pin.	Emergency control handle cannot be moved towards **ARMED** position.
- If emergency control handle can be moved towards **ARMED** position, inspect locking mechanism and/or emergency escape slide release mechanism and adjust as necessary (Ref. 52-23-21, P. Block 501 and/or 52-23-22, P. Block 501).	
- Move emergency control handle to **DISARMED** position.	
- Close emergency exit and move emergency control handle to **ARMED** position (Ref. 52-23-00, P. Block 301).	

ACTION	RESULT
- Make certain emergency escape slide cylinder pressure cannot be released (Ref. 25-61-23, P. Block 401).	
- Open exterior control handle.	Emergency control handle moves from **ARMED** to **DISARMED** position.
- If emergency control handle does not return to **DISARMED** position, inspect emergency escape slide release mechanism and/or emergency exit locking mechanism and adjust as necessary (Ref. 52-23-22, P. Block 501 and/or 52-23-21, P. Block 501).	

(3)Close exterior control handle and install emergency control handle safety pin. (Ref. 52-23-00, P. Block 301).

(4)Close-Up

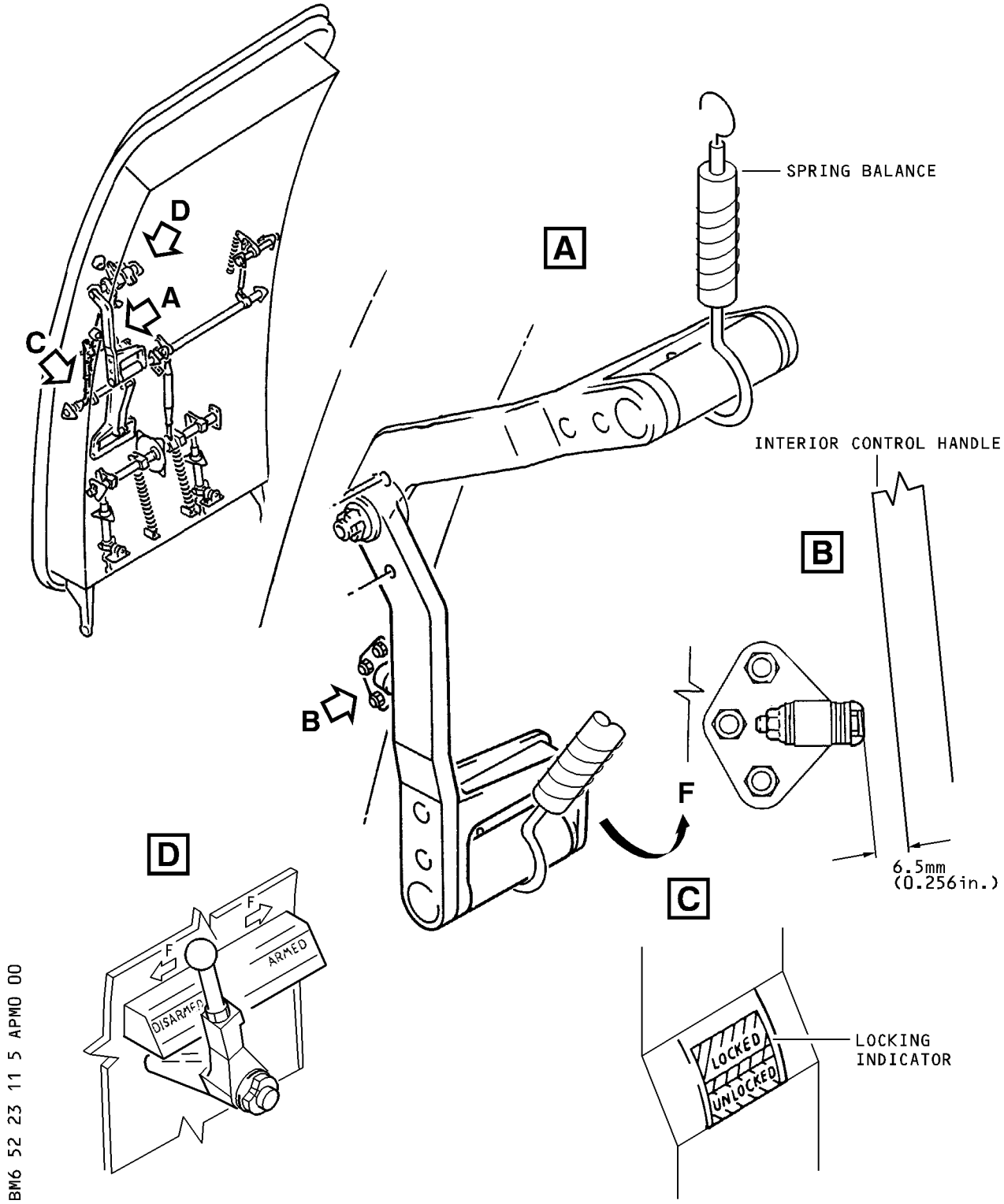
(a)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(b)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).

(c)Remove rubber mats.

(d)Remove access platform.



BM6 52 23 11 5 APMO 00

Interior Control Handle and Emergency Control Handle
Figure 508

R

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exit linings are identical in design and function but are opposite hand. The LH linings only are described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B.	Rubber Mats
C.	Supports
D.	Spring Balance, up to 20 daN (50 lbf.)

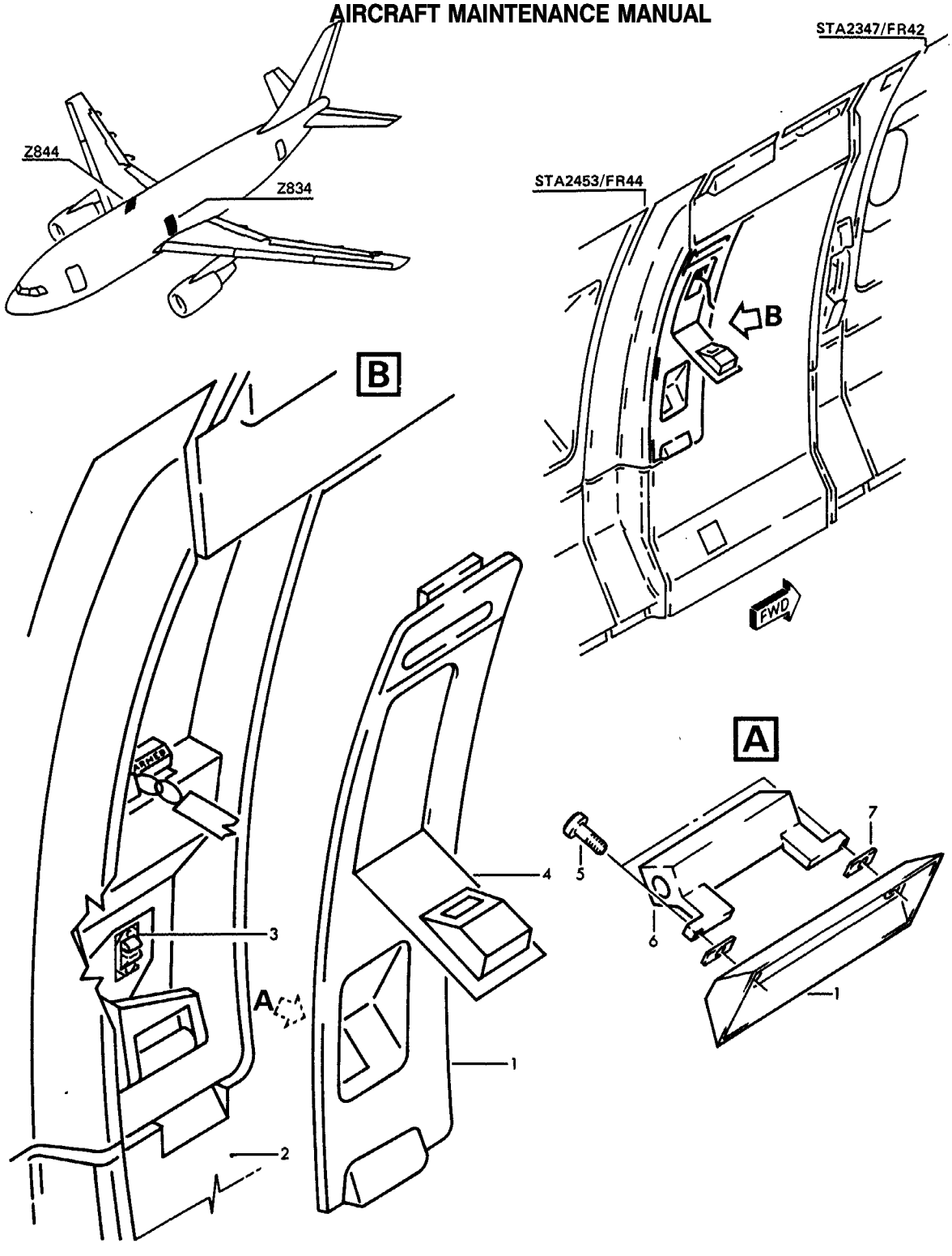
Referenced Procedure	
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions

2. Procedure

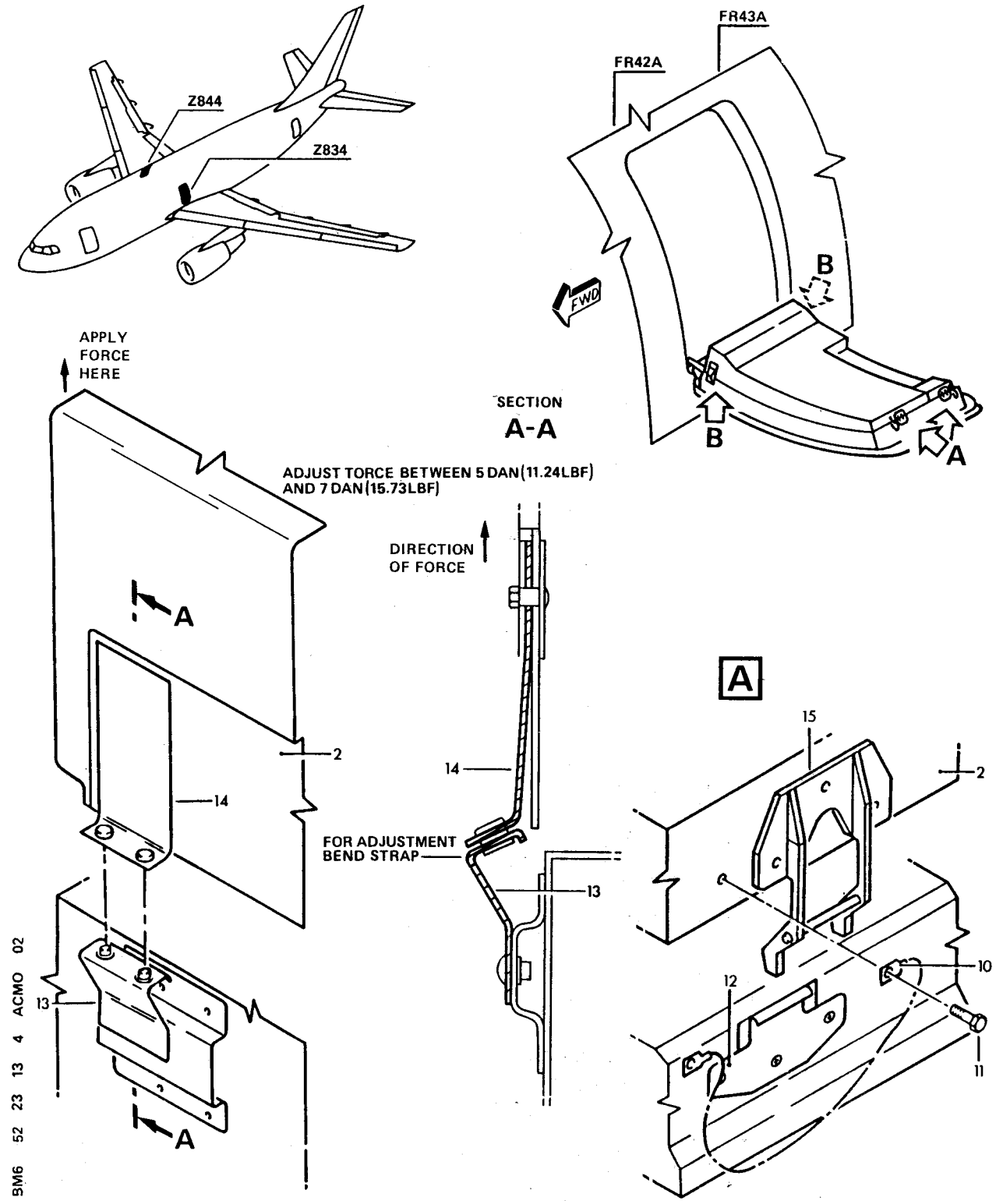
A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).

B. Removal (Ref. Fig. 401, 402)
(1)Remove handle cover assembly (1).
(a)Pull lower edge of handle cover assembly (1) inboard to release spring catch (3).
(b)Lower handle cover assembly (1) and remove from escape slide cover (2).
(2)Open emergency exit (Ref. 52-23-00, P. Block 301).
(3)Remove escape slide cover (2).
(a)Remove screw (11) and retaining strap (10).
(b)Separate quick-release fasteners on straps (14, 13) at lower edge of escape slide cover (2).
(c)Lift escape slide cover (2).
(d)Remove electrical components from escape slide cover (2).
(e)Remove escape slide cover (2) from emergency exit.

C. Preparation for Installation
(1)Make certain that all retainers of escape slide cover (2) and handle cover assembly (1) are serviceable prior to installation.



Handle Cover Assembly
Figure 401



Escape Slide Cover
Figure 402

R

D. Installation (Ref. Fig. 401, 402)
(1)Install escape slide cover (2).
(a)Install electrical components in escape slide cover (2).
(b)Locate brackets (15), at top of escape slide cover (2), in hooks (12).
(c)Lower escape slide cover (2) and engage quick-release fasteners on straps (14, 13).
CAUTION : MAKE CERTAIN THAT STRAPS (13) ARE CORRECTLY ADJUSTED.
R (d)Using spring balance pull strap (14) on escape slide cover (2) to
R disengage quick-release fasteners.
R Operating force should be between 5 daN (11.24 lbf.) and 7 daN
R (15.73 lbf.).
1 Should stated limit be exceeded, adjust straps (13).
(e)Position retaining strap (10) and install screw (11). Make certain that retaining strap (10) cannot be trapped between emergency exit and fuselage structure when emergency exit is closed.
(2)Close and open emergency exit and make certain that escape slide cover (2) does not obstruct movement of exit (Ref. 52-23-00, P. Block 301).
(3)Close emergency exit (Ref. 52-23-00, P. Block 301).
(4)Install handle cover assembly (1).
(a)Position upper edge of handle cover assembly (1).
(b)Press lower edge of handle cover assembly (1) until spring catch (3) and locking pin (6) fully engages. If necessary adjust locking pin (6) as follows: Remove screws (5) adjust locking pin (6) by adding shims (7) and install screws (5).
(5)Open flap (4) of handle cover assembly (1) and display streamer of safety pin.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(3)Remove rubber mats and supports.
(4)Remove access platform.

DAMPER CYLINDER - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exits are identical in design and function but are opposite hand. The LH exit only is decribed and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B.	Cotter Pins
C.	Rubber Mats
D.	Supports
E. Material No. 05-002	Special Materials (Ref. 20-31-00)
F. Material No. 05-027	Special Materials (Ref. 20-31-00)
G. Material No. 09-018	Sealants (Ref. 20-31-00)
H. Material No. 09-019	Sealants (Ref. 20-31-00)
J. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
K. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

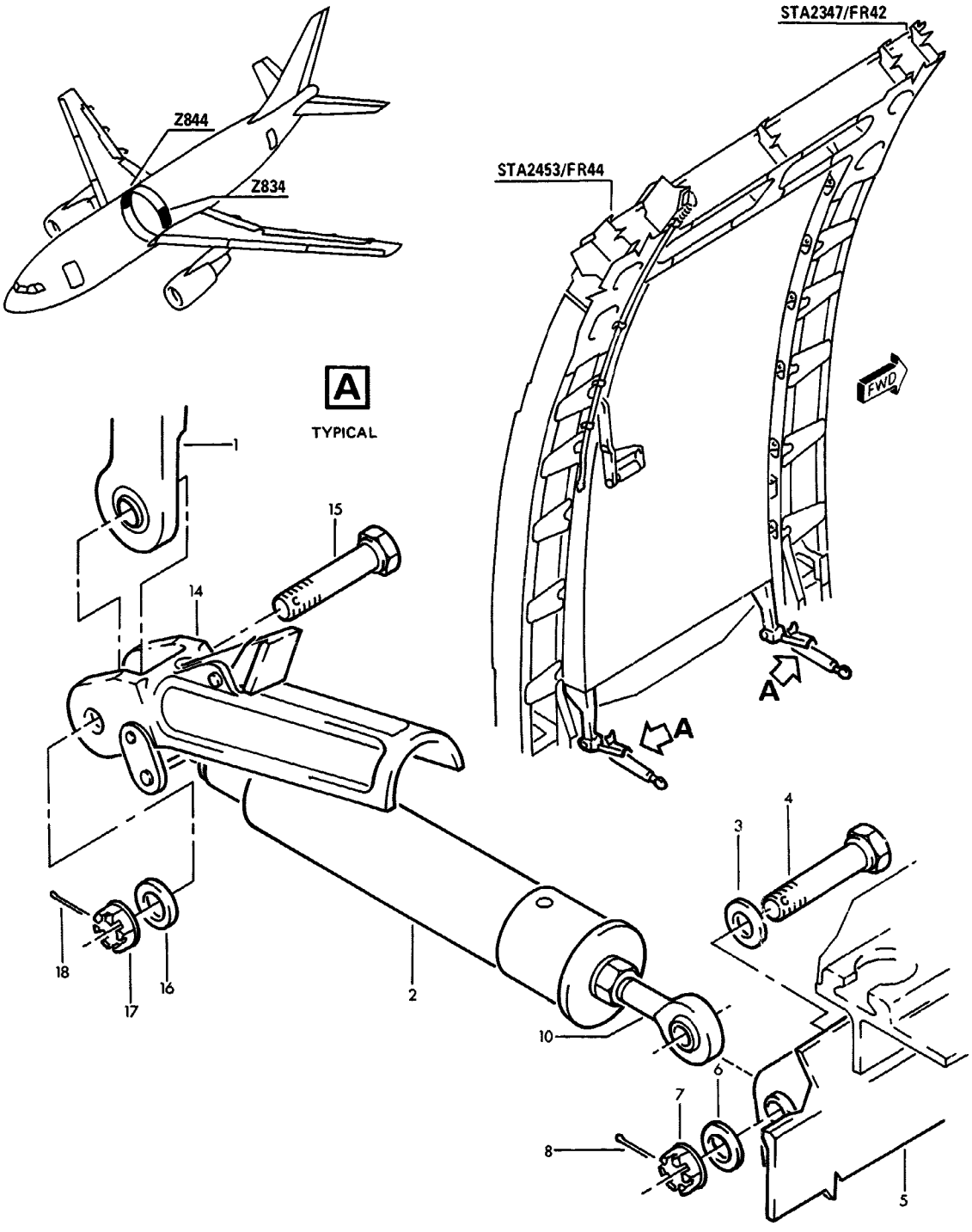
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 53-10-25, P. Block 401	Passenger Compartment Floor Panels

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove floor panel, as required (Ref. 53-10-25, P. Block 401).

B. Removal (Ref. Fig. 401)
(1)Remove cotter pin (18), nut (17), washer (16) and bolt (15) from fork-end (14) of damper cylinder (2).
(2)Move damper cylinder (2) away from emergency exit (1).
(3)Remove sealant from nut (7) and head of bolt (4).
(4)Remove cotter pin (8), nut (7) and washer (6).
(5)Remove bolt (4) and washer (3).
(6)Remove damper cylinder (2).

C. Preparation for Installation (Ref. Fig. 401)
(1)Remove damaged sealant and clean all components, except components coated with Polytetrafluoroethylene (PTFE), with cleaning agent (Mat. No. 11-004).
(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).



Damper Cylinder
Figure 401

D. Installation (Ref. Fig. 401)
(1)Position eye-end (10) of damper cylinder (2) in attach fitting (5).
(2)Position washer (3) and install bolt (4), washer (6) and nut (7).
(3)Position fork-end (14) of damper cylinder (2) and install bolt (15), washer (16) and nut (17).
(4)Remove supports.
(5)With exit supported by support cable check that:
(a)The locking latch of damper cylinder (2) is engaged and that gap, between end of latch and body of damper cylinder (2), is not more than 1.0 mm (0.04 in.).
(b)Gap between lower edge of emergency exit and fuselage skin is not less than 5.0 mm (0.2 in.).
(c)Gap between open exterior control handle and surface of wing is not less than 35.0 mm (1.38 in.).
(d)Should stated limits be exceeded, damper cylinder (2) must be adjusted (Ref. 52-23-11, P. Block 501).
(6)Install supports.
(7)Remove nut (7), washer (6), bolt (4) and washer (3).
(8)Apply sealant (Mat. No. 09-018) to plain shank of bolt (4) (Ref. 51-76-10, P. Block 801).
(9)Position floor panel.
(10)Position washer (3) and install bolt (4).
(11)Install washer (6) and nut (7).
(12)Safety nuts (7, 17) with cotter pins (8, 18).
(13)Cover nut (7) and head of bolt (4) with sealant (Mat. No. 09-019), (Ref. 51-76-10, P. Block 801).

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(3)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and apply if necessary (Ref. 51-75-10, P. Block 801).
(4)Install floor panel (Ref. 53-10-25, P. Block 401).
(5)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(6)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(7)Remove rubber mats and supports.
(8)Remove access platform.

SEAL - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF: 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exit seals are identical in design and function but are opposite hand. The LH seal only is described and illustrated.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B.	Torque Wrench, up to 1.0 m.daN (88.50 lbf.in.)
C.	Rubber Mats
D.	Nonmetallic Scraper
E.	Supports
F. Material No. 05-001	Special Materials (Ref. 20-31-00)
G. Material No. 05-002	Special Materials (Ref. 20-31-00)
H. Material No. 09-013	Sealants (Ref. 20-31-00)
J. Material No. 09-016	Sealants (Ref. 20-31-00)
K. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
L. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)
M. Material No. 16-003	Structure Paints (Ref. 20-31-00)

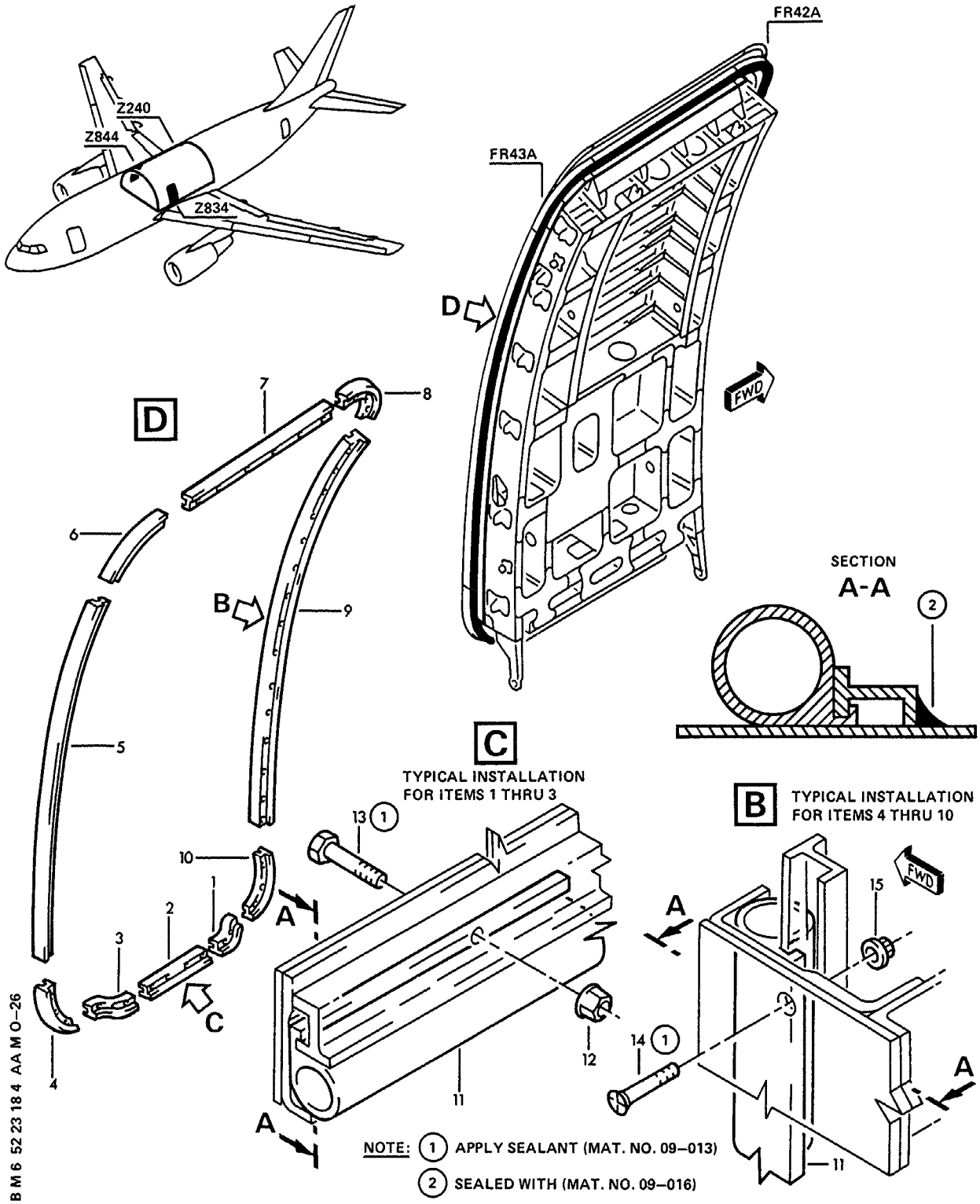
Referenced Procedures

- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open and support emergency exit (Ref. 52-23-00, P. Block 301).

B. Removal (Ref. Fig. 401)
(1)Remove nuts (12), bolts (13) and retainers (1, 2, 3). Record location of bolts (13) and retainers (1, 2, 3) for subsequent installation.
(2)Remove nuts (15), screws (14) and retainers (4 thru 10). Record location of screws (14) and retainers (4 thru 10) for subsequent installation.
(3)Remove seal (11) from emergency exit.



Seal and Retainers
Figure 401

C. Preparation for Installation (Ref. Fig. 401)
(1)Remove any remaining sealant from nuts (12, 15), bolts (13), screws (14) and retainers (1 thru 10) using cleaning agent (Mat. No. 11-004) and nonmetallic scraper.
(2)Clean seal (11) and contact area using alcohol (Mat. No. 11-008).

D. Installation (Ref. Fig. 401)
(1)Position seal (11).
(2)Apply sealant (Mat. No. 09-013) to plain shank of bolts (13) and screws (14).
(3)Position retainers (1 thru 10) as previously recorded.
(4)Install bolts (13), screws (14) and nuts (12, 15) as previously recorded.
(5)TORQUE nuts (12, 15) to between 0.4 and 0.5 m.daN (35.40 and 44.25 lbf.in.).
(6)Remove extruded sealant from emergency exit skin using cleaning agent (Mat. No. 11-004).
(7)Apply sealant (Mat. No. 09-016) to form bead seal between retainers and structure of door. Coat sealant when dry, with lacquer (Mat. No. 16-003) (Ref. 51-76-10, P. Block 801).
(8)Apply sealing grease (Mat. No. 05-001) to seal (11).

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(3)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(4)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(5)Remove supports and rubber mats.
(6)Remove access platform.

SEAL - APPROVED REPAIRS

WARNING : CLEANING AGENT (MAT. NO. 11-004) IS DANGEROUS AND A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT. AVOID INHALING FUMES.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-22-00, P. BLOCK 301).

NOTE : The LH and RH emergency exit seals are identical in design and function but are opposite hand. The LH seal only is described and illustrated.

1. Reasons for the Job

A. Repair of:
(1) Chafe marks and cuts up to 25.4 mm (1.0 in.) and not in contact area.
(2) Chafe marks and cuts exceeding 25.4 mm (1.0 in.) in length, or in contact area by replacement of section.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.60 m (15.0 ft.)
B.	Wooden Bonding Blocks
C.	C-Clamps
D.	Lint-Free Cloth
E.	Nonmetallic Scraper
F.	Very Fine Emery Cloth
G. Material No. 05-023	Special Materials (Ref. 20-31-00)
H. Material No. 05-024	Special Materials (Ref. 20-31-00)
J. Material No. 08-004	Bonding and Adhesive Compounds (Ref. 20-31-00)
K. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)

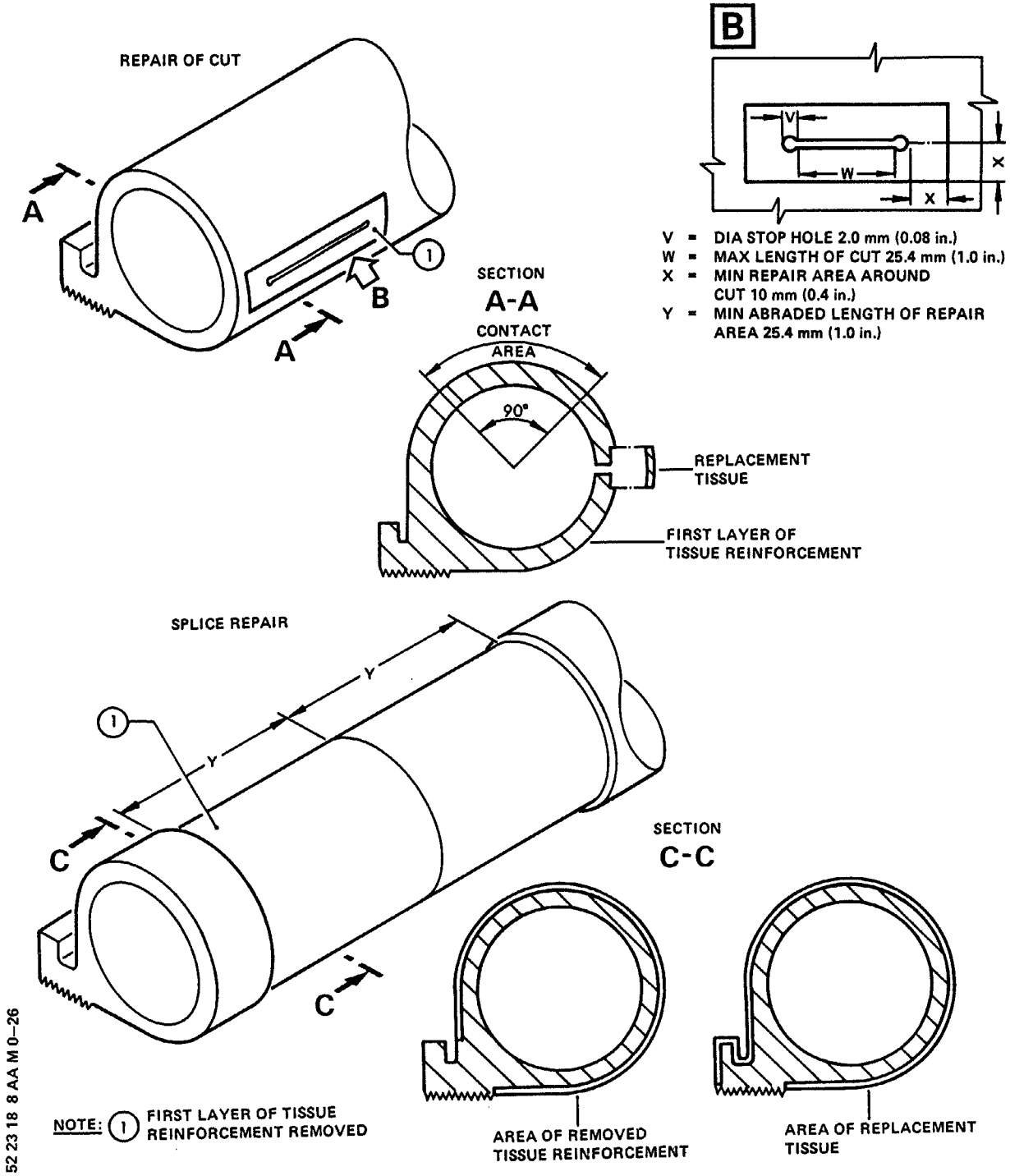
Referenced Procedures

- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-18, P. Block 401	Seal

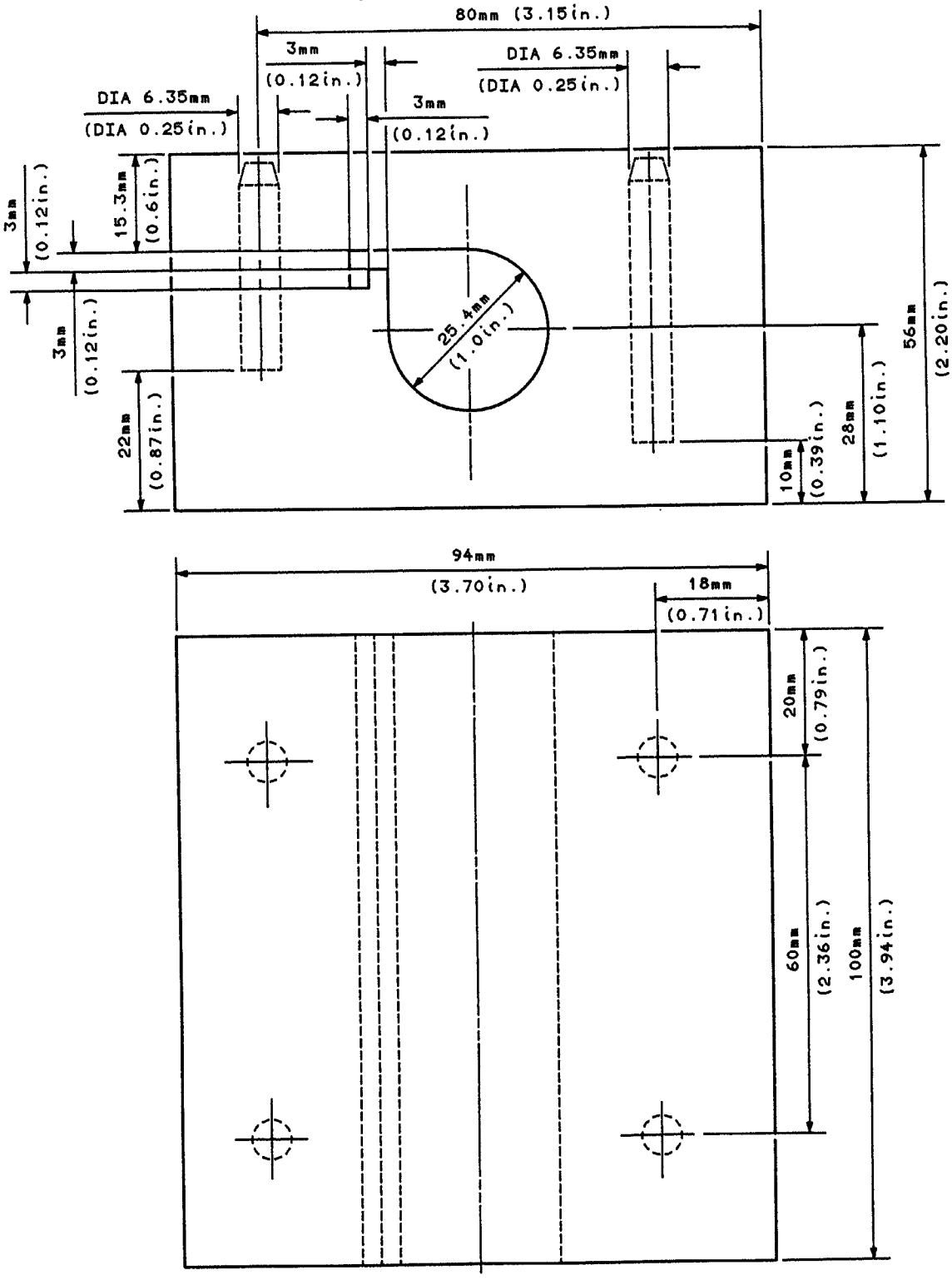
3. Procedure

A. Job Set-Up
(1)Position access platform.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(2)Safety emergency escape slide and door warning system (Ref. 52-23-00, P. Block 301).
(3)Open emergency exit.
(4)Remove seal (Ref. 52-23-18, P. Block 401).

B. Approved Repairs
(1)Repair of chafe marks and cuts up to 25.4 mm (1.0 in.) and not in contact area (Ref. Fig. 801, 802).
(a)Drill stop holes of 2 mm (0.08 in.) dia. at the ends of cut.
(b)Open cut by applying pressure to seal and slightly abrade face of cut using very fine emery cloth.
(c)Carefully remove the first layer of reinforcing tissue from door seal for a distance of 10 mm (0.4 in.) around cut (repair area).
WARNING : CLEANING AGENT (MAT. NO. 11-004) IS DANGEROUS.
(d)Carefully degrease repair area with cleaning agent (Mat. No. 11-004) and a lint-free cloth.
(e)Apply a thin coat of bonding and adhesive compound (Mat. No. 08-004) to faces of cut.
(f)Press faces of cut together as far as possible and allow them to dry for some minutes.
(g)Cut a piece of tissue (Mat. No. 05-024) to a size necessary to insert it in the repair area.
(h)Apply a thin coat of bonding and adhesive compound (Mat. No. 08-004) to repair area and fill stop holes.
(j)Position piece of tissue (Mat. No. 05-024) in repair area.
(k)Cover repair area with a layer of foil (Mat. No. 05-023) and position seal in wooden bonding block.
(l)Compress repair area in wooden bonding block using C-Clamp.
(m)Allow bonding and adhesive compound (Mat. No. 08-004) to dry for 24 hours.
(n)Remove bonding block and foil.
(p)Remove excessive adhesive compound using emery cloth.



Repair of Seal
Figure 801



B M 6 52 23 18 8 ACM0-26

Wooden Bonding Block
Figure 802

(2)Repair of chafe marks and cuts exceeding 25.4 mm (1 in.) in length or in contact area by replacement of section (Ref. Fig. 801, 802).
(a)Remove the damaged section of seal.
NOTE : Minimum repair length of replacement section is:
- for straight section, 200 mm (7.87 in.)
- for curved section, 200 mm (7.87 in.) measured from edge of corner.
(b)In curved section, cut and remove damaged seal to same length as replacement curved section.
(c)For straight sections, cut a section of replacement door seal to same length as removed section.
(d)Make certain that quantity of inflation holes is the same as in removed section.
(e)Carefully remove the first layer of reinforcing tissue from the ends of seal and replacement section over a length of 25.4 mm (1.0 in.).
(f)Slightly abrade faces of seal and replacement section with emery cloth.
WARNING : CLEANING AGENT (MAT. NO. 11-004) IS DANGEROUS.
(g)Carefully degrease repair area with cleaning agent (Mat. No. 11-004) and a lint-free cloth.
(h)Apply a thin coat of bonding and adhesive compound (Mat. No. 08-004) to ends of seal and replacement section.
(j)Insert replacement section in seal, press the end faces together and allow them to dry for some minutes.
(k)Cut tissue (Mat. No. 05-024) to size of repair areas. Apply adhesive compound (Mat. No. 08-004) mating surfaces of tissue and seal.
(l)Position tissue (Mat. No. 05-024) around seal repair areas.
(m)Cover repair areas with a layer of foil (Mat. No. 05-023) and position them in wooden bonding blocks.
(n)Compress repair areas in wooden bonding blocks using C-Clamps.
(p)Allow bonding and adhesive compound to dry for 24 hours.
(q)Remove bonding blocks and foil.
(r)Remove excessive bonding and adhesive compound using emery cloth.

C. Close-Up
(1)Install seal (Ref. 52-23-18, P. Block 401).
(2)Make certain that working area is clean, and clear of tools and miscellaneous items of equipment.
(3)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(4)Activate emergency exit warning system (Ref. 52-23-00, P. Block 301).
(5)Remove access platform.

LOCKING MECHANISM - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

CAUTION : LARGER DIAMETER OF SPRING ROD CYLINDER (157) MUST BE INSTALLED AT UPPER POSITION.

NOTE : The LH and RH emergency exit mechanisms are identical in design and function but are opposite hand. The LH locking mechanism only is described and illustrated.

1. Reasons for the Job

A. Removal and installation of the following:

NOTE : Item No. correspond with operations in Para. 3. C. and 3. E.

(1)Pushrod
(2)Interior control handle and splined shaft
(3)Locking indicator
(4)Exterior control handle and splined shaft
(5)Lowering shafts
(6)Lifting shaft
(7)Lift safety lock mechanism
(8)Hinge rods

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D.	Corrosion-Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
E.	Cotter Pins
F.	Rubber Mats
G.	Supports
H.	Torque Wrench, up to 2 m.daN (177 lbf.in.)
J. Material No. 04-004	Common Greases (Ref. 20-31-00)
K. Material No. 04-017	Common Greases (Ref. 20-31-00)
L. Material No. 05-001	Special Materials (Ref. 20-31-00)
M. Material No. 05-002	Special Materials (Ref. 20-31-00)
N. Material No. 05-027	Special Materials (Ref. 20-31-00)
P. Material No. 09-018	Sealants (Ref. 20-31-00)
Q. Material No. 09-019	Sealants (Ref. 20-31-00)
R. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
S. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

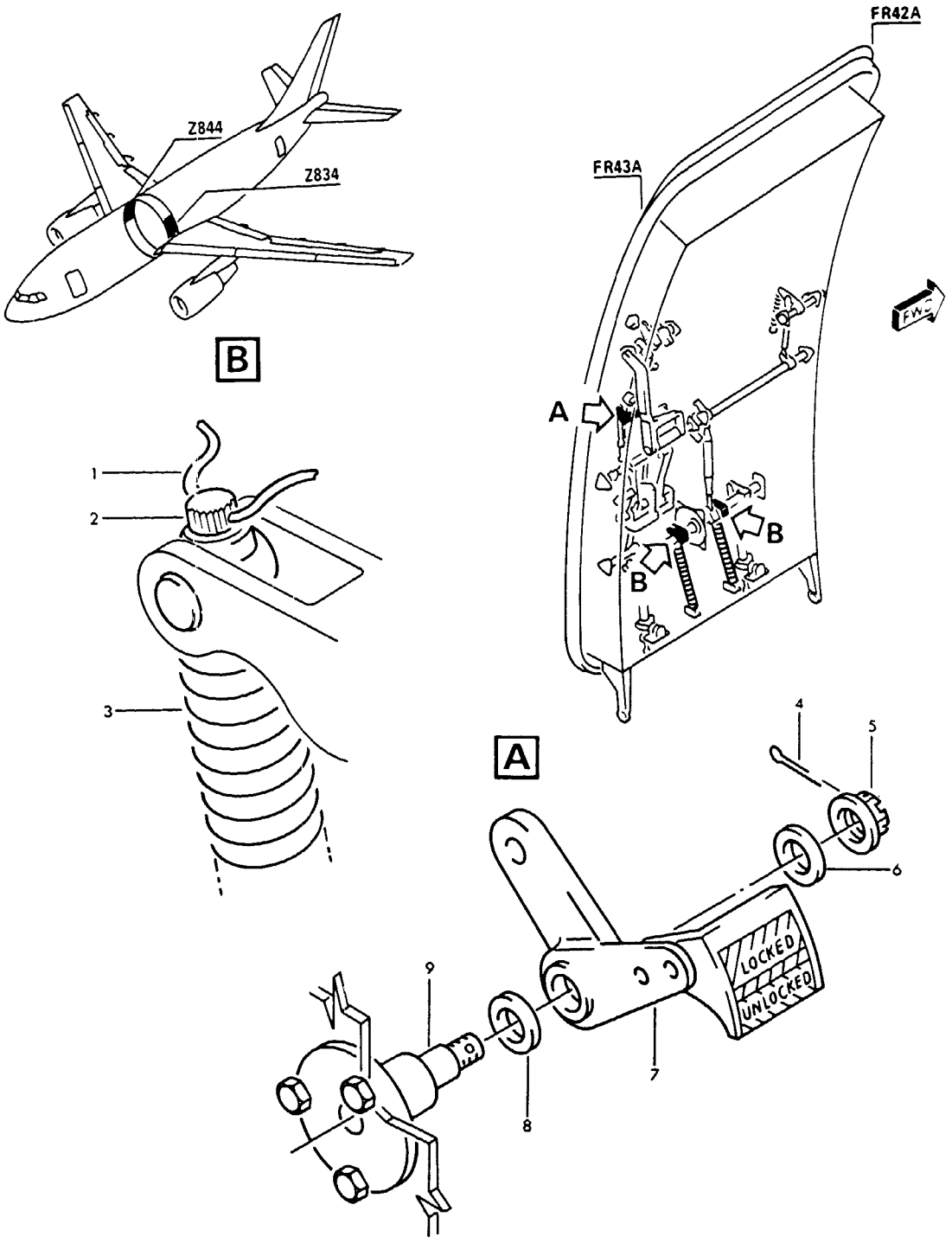
- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-00, P. Block 601	Emergency Exit
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

3. Procedure

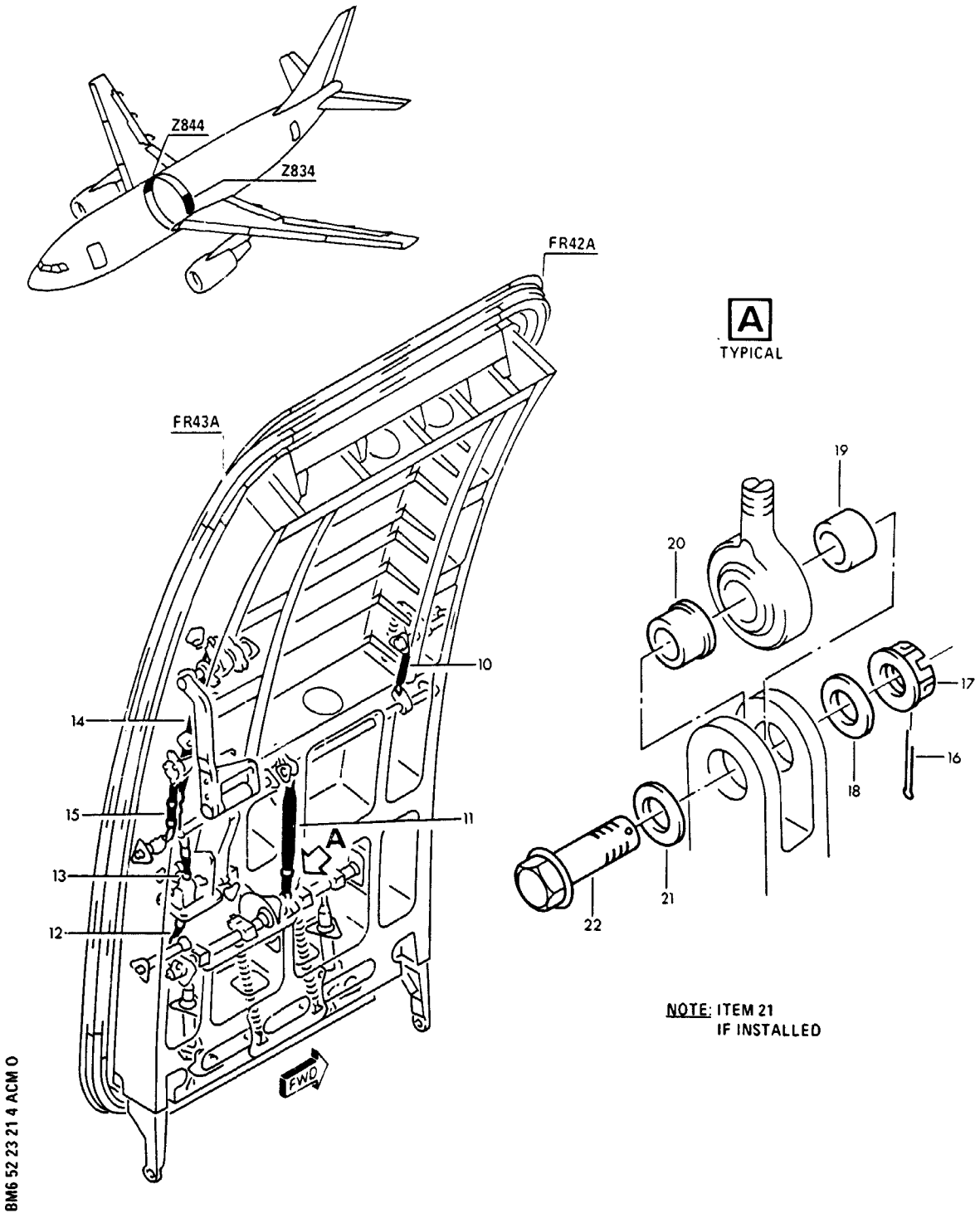
A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Install ballast weight P/N 98A52207607000 (P/N 98A52207614000).
(8)Remove emergency control handle, if necessary (Ref. 52-23-22, P. Block 401).
(9)Remove access panels, as required.
(10)Remove emergency exit insulation, if necessary.

B. Release Spring Tension of Lift Compensation Mechanism (Ref. Fig. 401)
(1)Cut and remove lockwire (1).
(2)Loosen tension bolts (2) until tension of springs (3) is released.

C. Removal
(1)Pushrod - Typical (Ref. Fig. 402)
(a)Remove cotter pin (16), nut (17) and washer (18).
(b)Remove bolt (22), and washer (21), if installed.
(c)Remove pushrods (10, 11, 12, 13, 14, 15).
(d)Remove bushes (19, 20).
(2)Interior Control Handle and Splined Shaft (Ref. Fig. 403)
NOTE : Record position of interior control handle (39) and levers (33, 34) on splined shaft (35) for subsequent installation.
(a)Disconnect pushrod (14) (Ref. Para. C. (1)).
(b)Remove nuts (32) and bolts (31) from levers (33, 34).
(c)Remove cotter pin (44), nut (43), washers (42, 41, 40) and interior control handle (39).
(d)Remove cotter pin (25), nut (26), washers (27, 28) and shim washers (29).
(e)Slide splined shaft (35) aft and remove levers (33, 34).
(f)Remove splined shaft (35) and washer (38).
(g)Remove splined bush (37) from bearing assembly (36).
NOTE : Make certain bushes in bearing assemblies (30, 36) are retained in position.
(3)Locking Indicator (Ref. Fig. 401)
(a)Disconnect pushrod (15) (Ref. Para. C. (1)).
(b)Remove cotter pin (4), nut (5), washer (6), locking indicator (7) and washer (8) from pivot (9).



Spring Tension Release and Locking Indicator
Figure 401



Pushrod - Typical
Figure 402

(4)Exterior Control Handle and Splined Shaft (Ref. Fig. 404)

NOTE : Record position of exterior control handle (58) and levers (52, 61, 64) on splined shaft (57) for subsequent installation.

(a)Remove access panel covering exterior control handle (58).
(b)Disconnect pushrods (11, 13, 14, 15) (Ref. Para. C.(1)).
(c)Remove nuts (63) and bolts (62) from levers (61, 64).
(d)Cut and remove lockwire from bolt (50).
(e)Remove bolt (50), washer (51), lever (52) and shim washers (53).
(f)Release lockwasher (56) and unscrew nut (55).
(g)Remove cotter pin (75), nut (74), washers (73, 72, 71) and shim washers (70).
(h)Remove nuts (67), bolts (68) and bearing assembly (69).

NOTE : Make certain bushes, in bearing assembly (69), are retained in position.

(j)Remove shim washers (66) and washer (65).
(k)Slide splined shaft (57) aft until nut (55) and lockwasher (56) can be removed.
(l)Raise packing (60) onto splines of splined shaft (57).
(m)Slide splined shaft (57) aft until circlip (59) is visible.
(n)Raise circlip (59) onto splines of splined shaft (57).
(p)Slide splined shaft (57) aft and remove exterior control handle (58), circlip (59), packing (60) and levers (61, 64).
(q)Remove splined shaft (57).

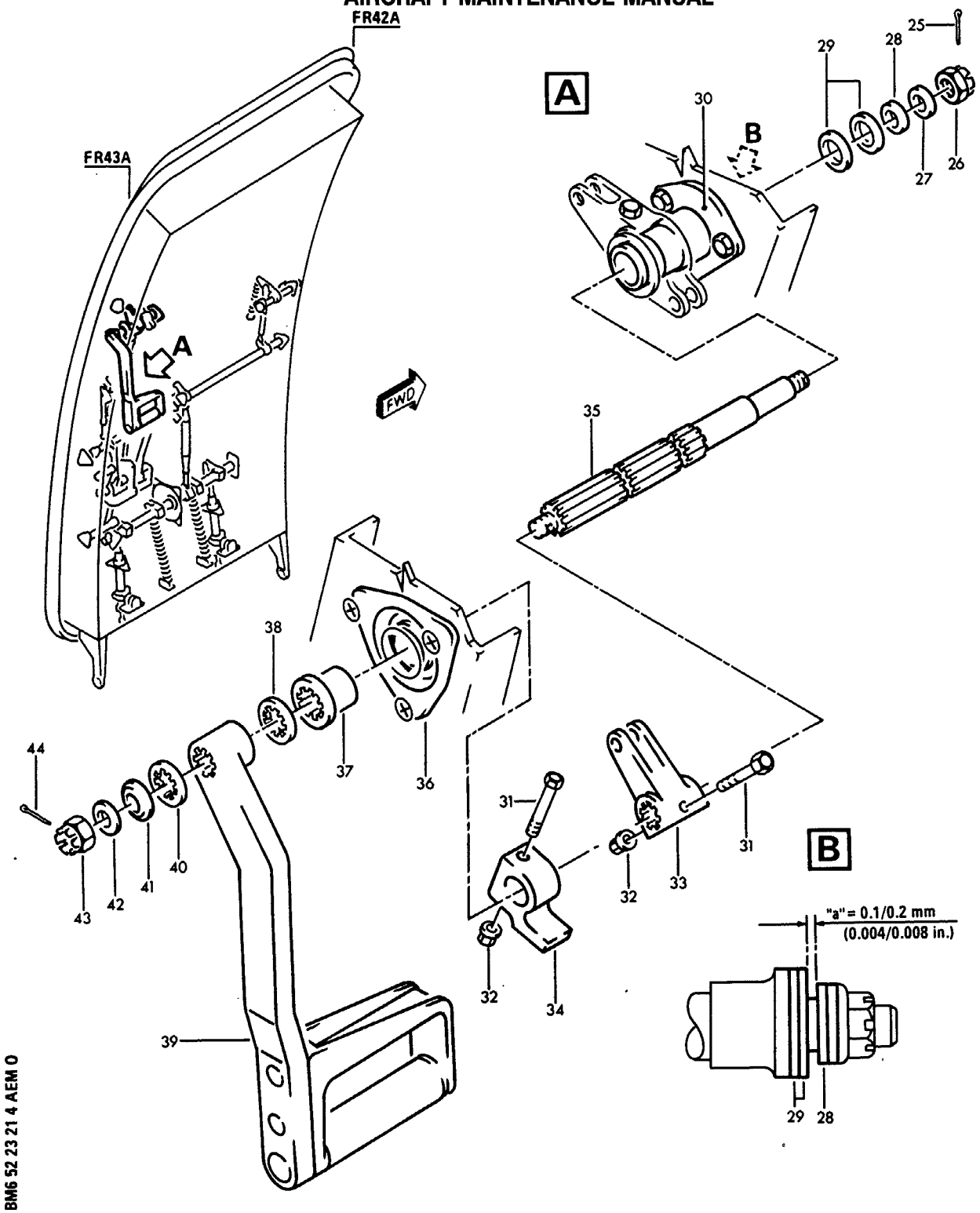
NOTE : Make certain bushes, in bearing assembly (54), are retained in position.

(5)Lowering Shafts (Ref. Fig. 405)

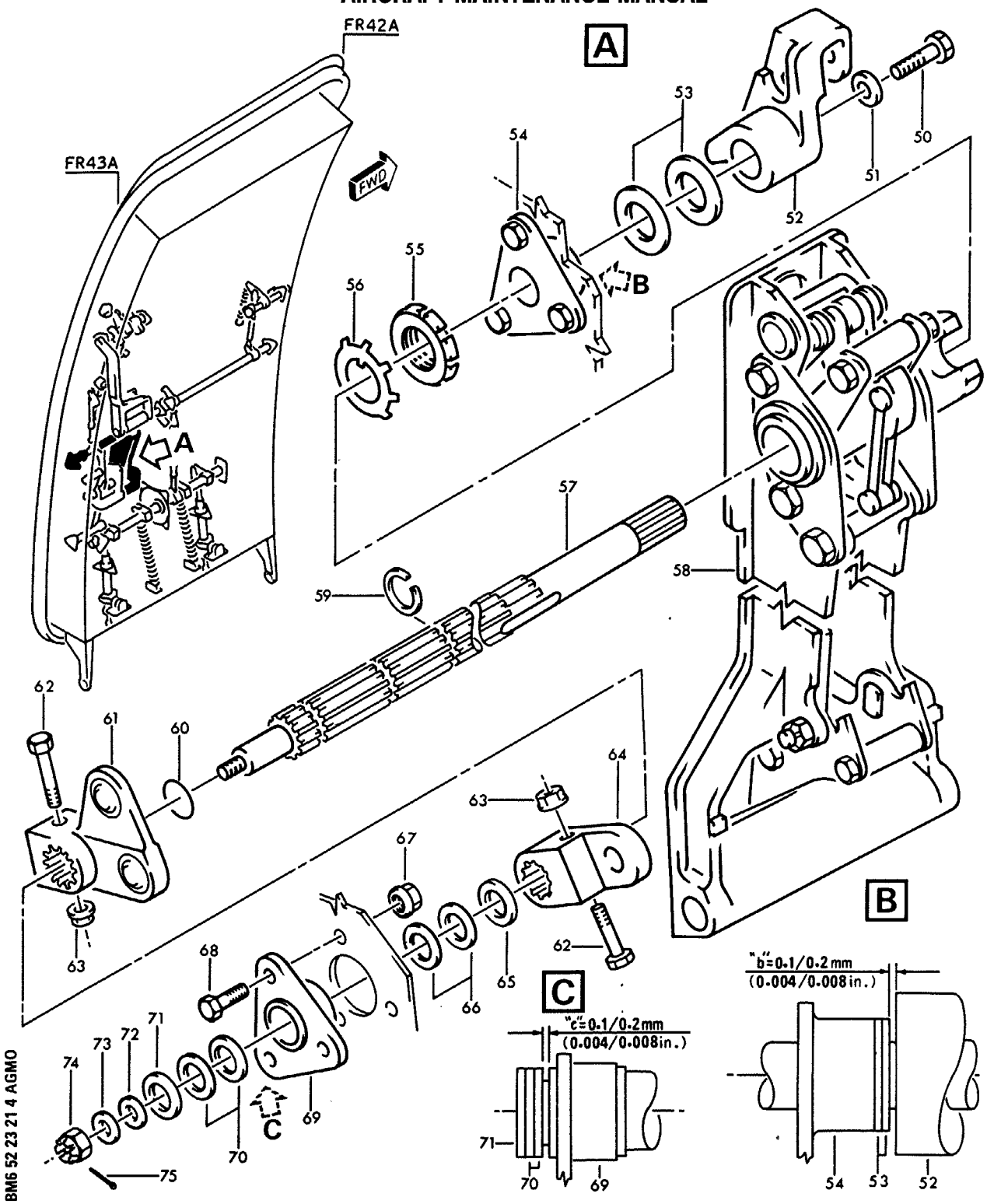
NOTE : Record position of levers (84, 88, 101) and hook (102) on lowering shafts (87, 98) for subsequent installation.

(a)Remove upper lowering shaft (87).
1 Remove cotter pin (76), washer (77) and pin (79). Disconnect spring (78) from lever (88).
2 Disconnect pushrod (10) (Ref. Para. C. (1)).
3 Remove cotter pin (80), nut (81), washer (82) and lever (84).
4 Remove nut (90) and bolt (89) from lever (88).
5 Remove nuts (86), bolts (83) and bearing assembly (85).
6 Slide upper lowering shaft (87) fwd and remove lever (88).
7 Remove upper lowering shaft (87).

(b)Remove lower lowering shaft (98).
1 Disconnect pushrod (10) (Ref. Para. C. (1)).
2 Remove nuts (100) and bolts (99) from lever (101) and hook (102).
3 Remove nuts (96), bolts (95) and bearing assembly (97).
4 Slide lower lowering shaft (98) fwd and remove shim washers (103), hook (102) and lever (101).
5 Remove lower lowering shaft (98).

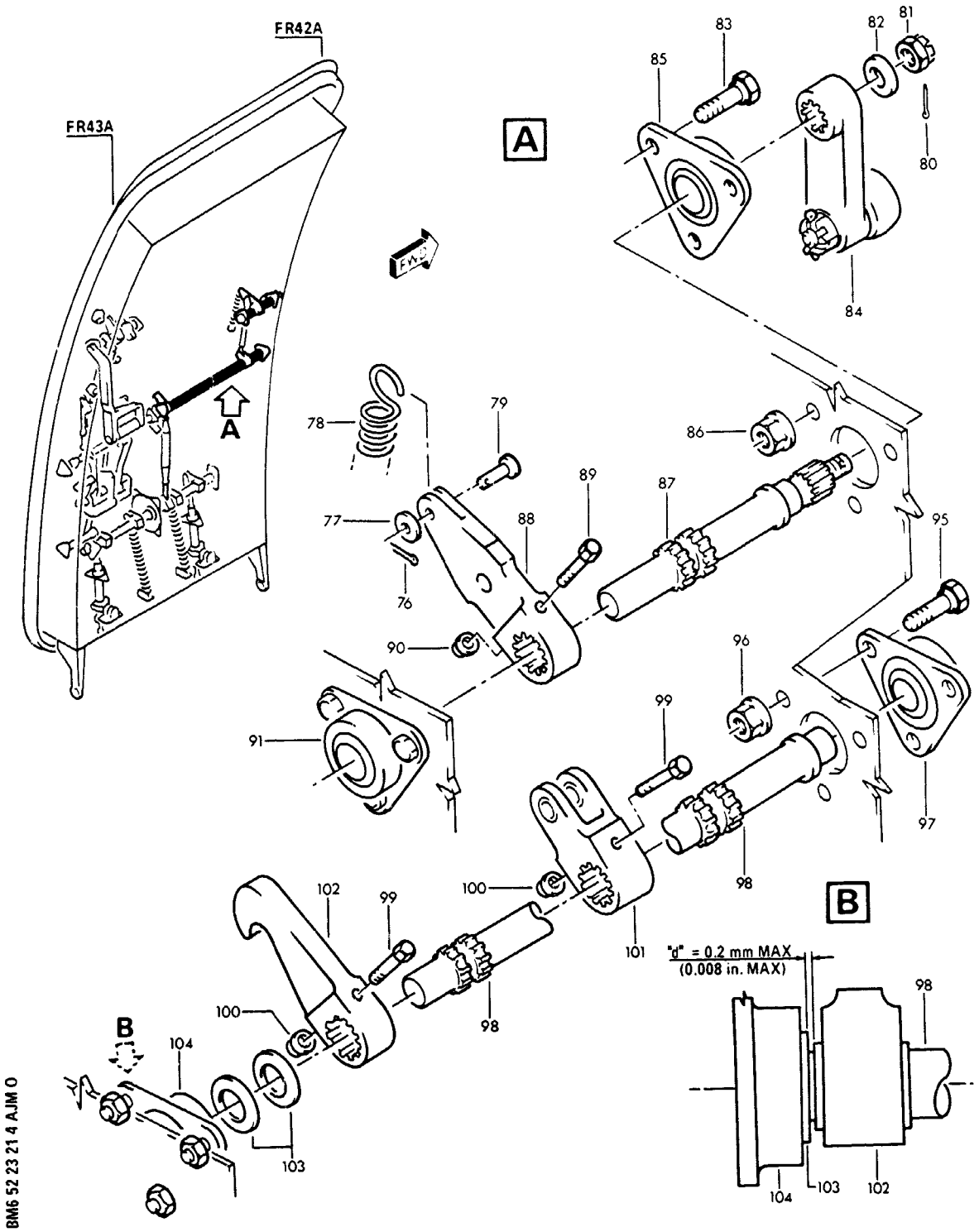


Interior Control Handle and Splined Shaft
Figure 403

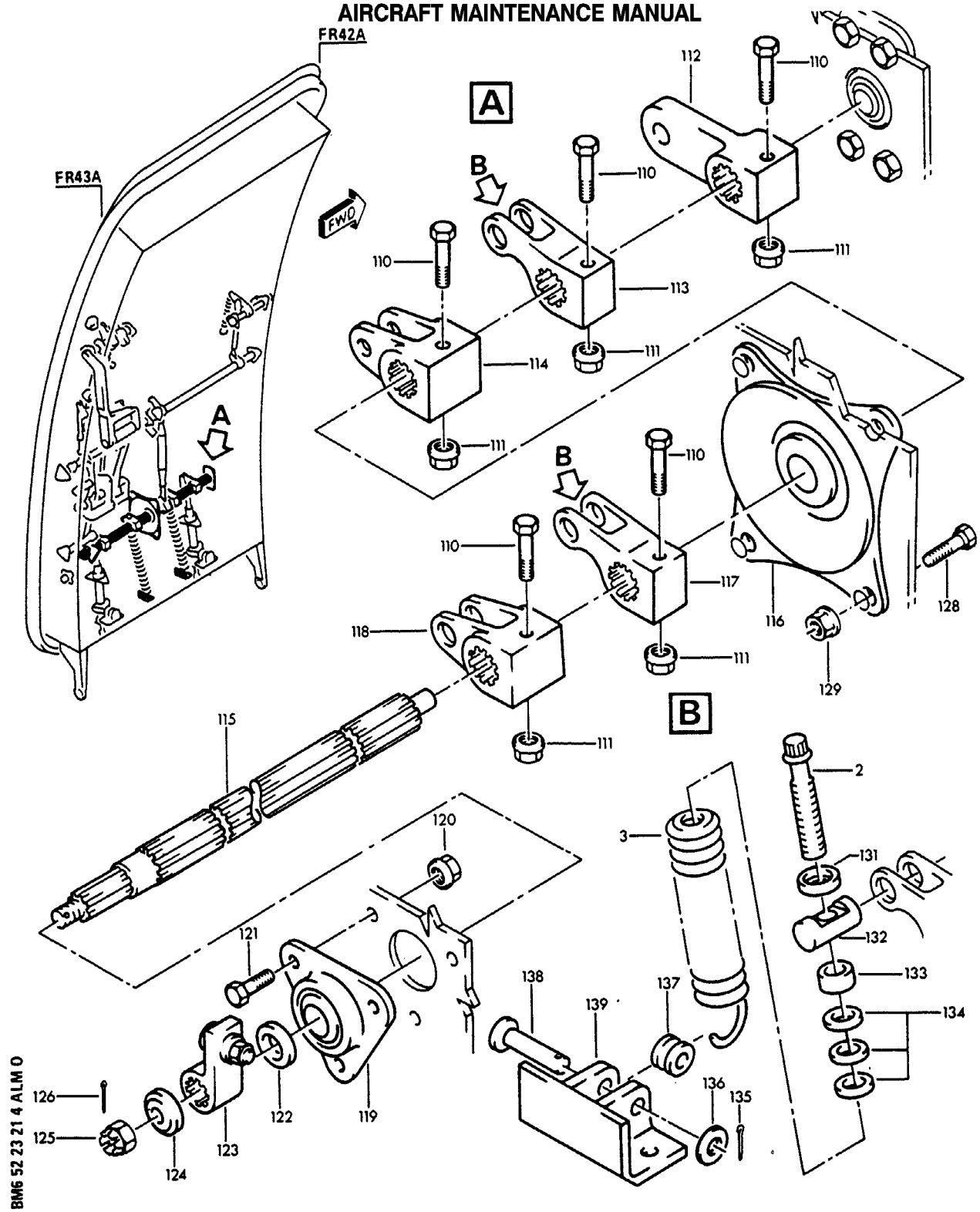


Exterior Control Handle and Splined Shaft
Figure 404

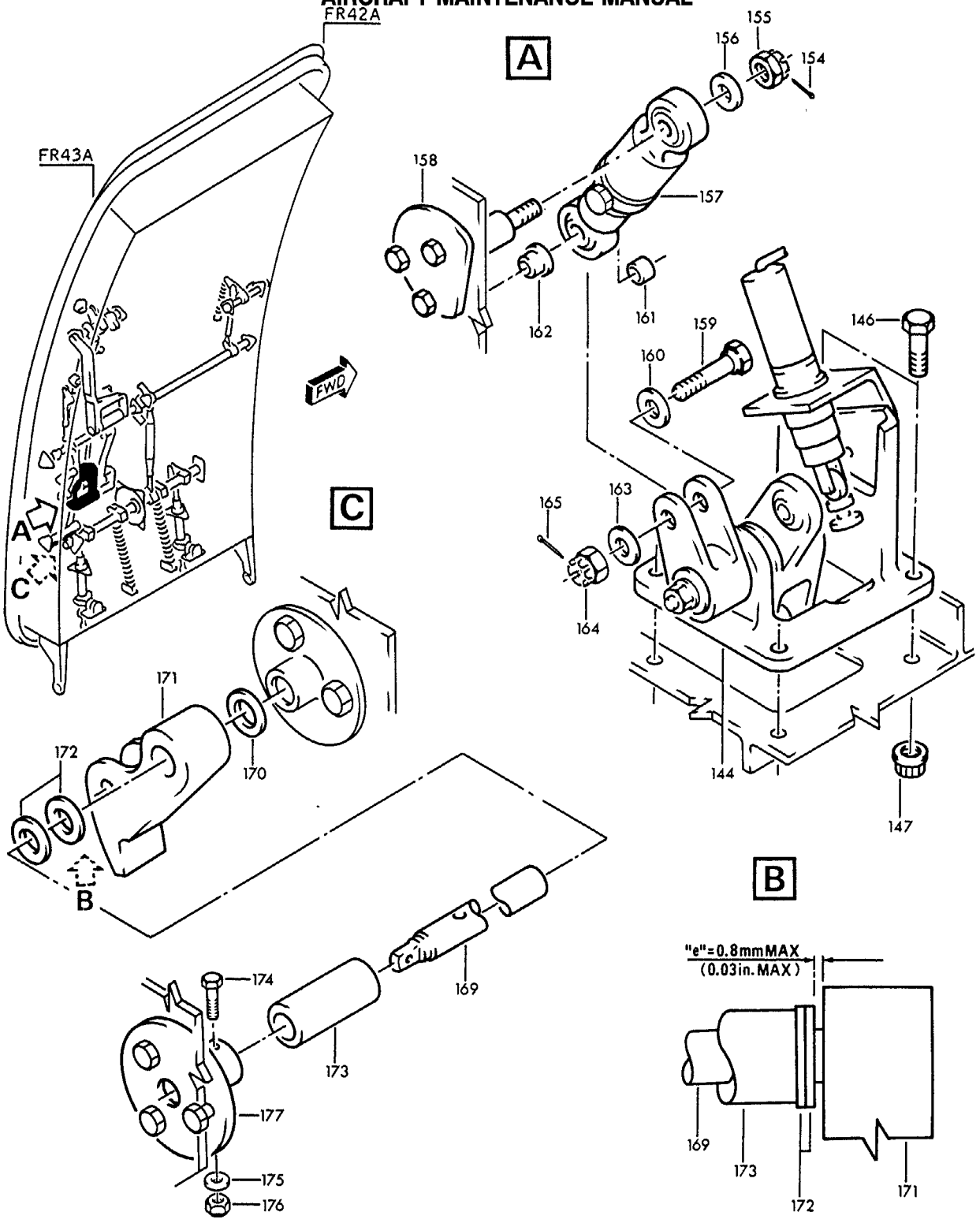
(6)Lifting Shaft (Ref. Fig. 406)
NOTE : Record position of levers (112, 113, 114, 117, 118, 123) on lifting shaft (115) for subsequent installation.
(a)Disconnect pushrod (11) (Ref. Para. C. (1)).
(b)Disconnect tension spring (3) of emergency exit lift mechanism.
1 Remove tension bolts (2), cupwashers (131), spacers (133) and spring tension adjust washers (134). Record number of washers (134) for subsequent installation.
2 Remove bushes (132).
3 Remove cotter pins (135), washers (136) and withdraw pins (138) from attach fittings (139).
4 Remove springs (3) and rollers (137).
(c)Disconnect hinge rods (Ref. Para. C. (7)).
(d)Remove lower roller fitting from emergency exit aft frame.
(e)Remove nuts (111) and bolts (110) from levers (112, 113, 114, 117, 118).
(f)Remove cotter pin (126), nut (125), shim washers (124), lever (123) and spacer (122).
(g)Remove nuts (120), bolts (121) and bearing assembly (119).
(h)Remove nuts (129) and bolts (128) from bearing assembly (116).
(j)Slide lifting shaft (115) aft through access hole in emergency exit frame and remove levers (112, 113, 114) and bearing assembly (116).
(k)Remove lifting shaft (115) and levers (117, 118).
(7)Lift Safety Lock Mechanism (Ref. Fig. 407)
(a)Disconnect pushrods (12, 13) (Ref. Para. C. (1)).
(b)Remove spring rod cylinder (157).
NOTE : Spring rod cylinder (157) is under load.
1 Remove cotter pin (154), nut (155) and washer (156).
2 Remove spring rod cylinder (157) from pivot (158).
3 Remove cotter pin (165), nut (164), washer (163), bolt (159) and washer (160).
4 Remove spring rod cylinder (157) and bushes (161, 162).
(c)Disconnect cable harness from microswitch at upper assembly (144).
(d)Remove nuts (147) and bolts (146).
(e)Remove upper assembly (144) from emergency exit.
(f)Remove nut (176), washer (175) and bolt (174) from support (177).
(g)Slide shaft (169) aft through support (177) and remove washer (170), lever (171), shim washer (172) and sleeve (173).
(h)Remove shaft (169).



Lowering Shafts
Figure 405



Lifting Shaft
Figure 406



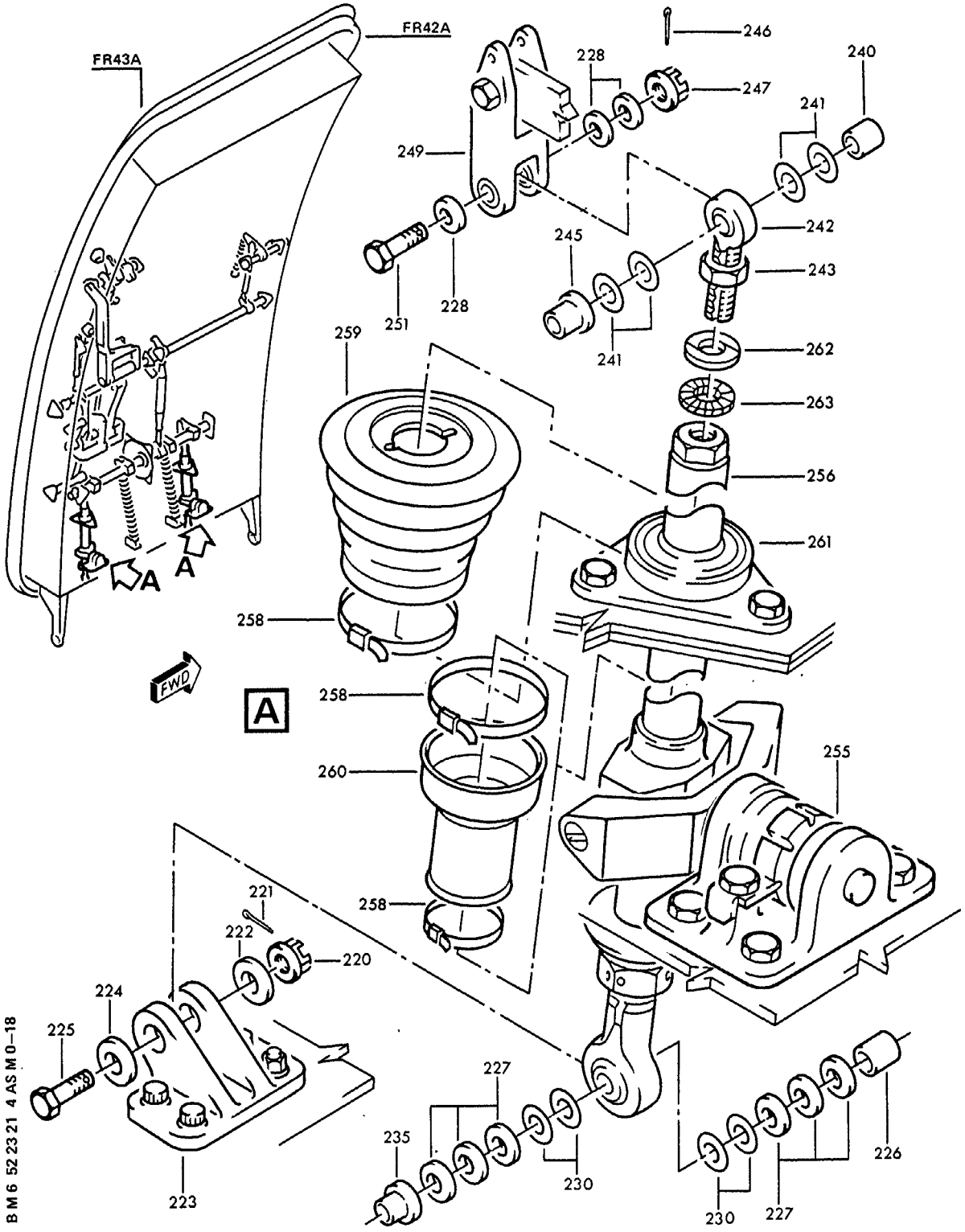
Lift Safety Lock Mechanism
Figure 407

** ON DOOR SERIAL NO. 1002-1096

(8)Hinge Rods (Ref. Fig. 409)
(a)Remove cotter pin (216), nut (215), washers (214, 212) and bolt (211).
(b)Move link (213) away from hinge rod (203) and remove shim washers (206). Record location of shim washers (206) for subsequent installation.
(c)Remove bushes (205, 210).
(d)Cut and remove lockwire from locknut (208).
(e)Loosen locknut (208) and remove eye-end (209) from hinge rod (203).
(f)Remove cotter pin (190), nut (191), washers (192, 194) and bolt (195).
(g)Slide hinge rod (203) inboard through bearing assembly (204), guide assembly (202) and hinge (193).
(h)Remove washers (197, 200). Record location of washers (197, 200) for subsequent installation.
(j)Remove hinge rod (203).
(k)Remove bushes (196, 201).

** ON DOOR SERIAL NO. 1097 AND SUBSEQUENT

(8)Hinge Rods (Ref. Fig. 408)
(a)Remove cotter pin (246), nut (247), washers (228) and bolt (251).
(b)Move link (249) away from hinge rod (256) and remove shim washers (241). Record location of shim washers (241) for subsequent installation.
(c)Remove bushes (240, 245).
(d)Cut and remove lockwire from locknut (243).
(e)Loosen locknut (243), remove eye-end (242) and tabwashers (262, 263) from hinge rod (256).
(f)Remove cotter pin (221), nut (220), washers (222, 224) and bolt (225).
(g)Slide hinge rod (256) inboard through bearing assembly (261), guide assembly (255) and hinge (223).
(h)Remove washers (227, 230). Record location of washers (227, 230) for subsequent installation.
(j)Remove cable ties (258) and rubber cover (259, 260) if applicable.
(k)Remove hinge rod (256).
(l)Remove bushes (226, 235).



Hinge Rods
Figure 408

** ON ALL DOORS

D. Preparation for Installation

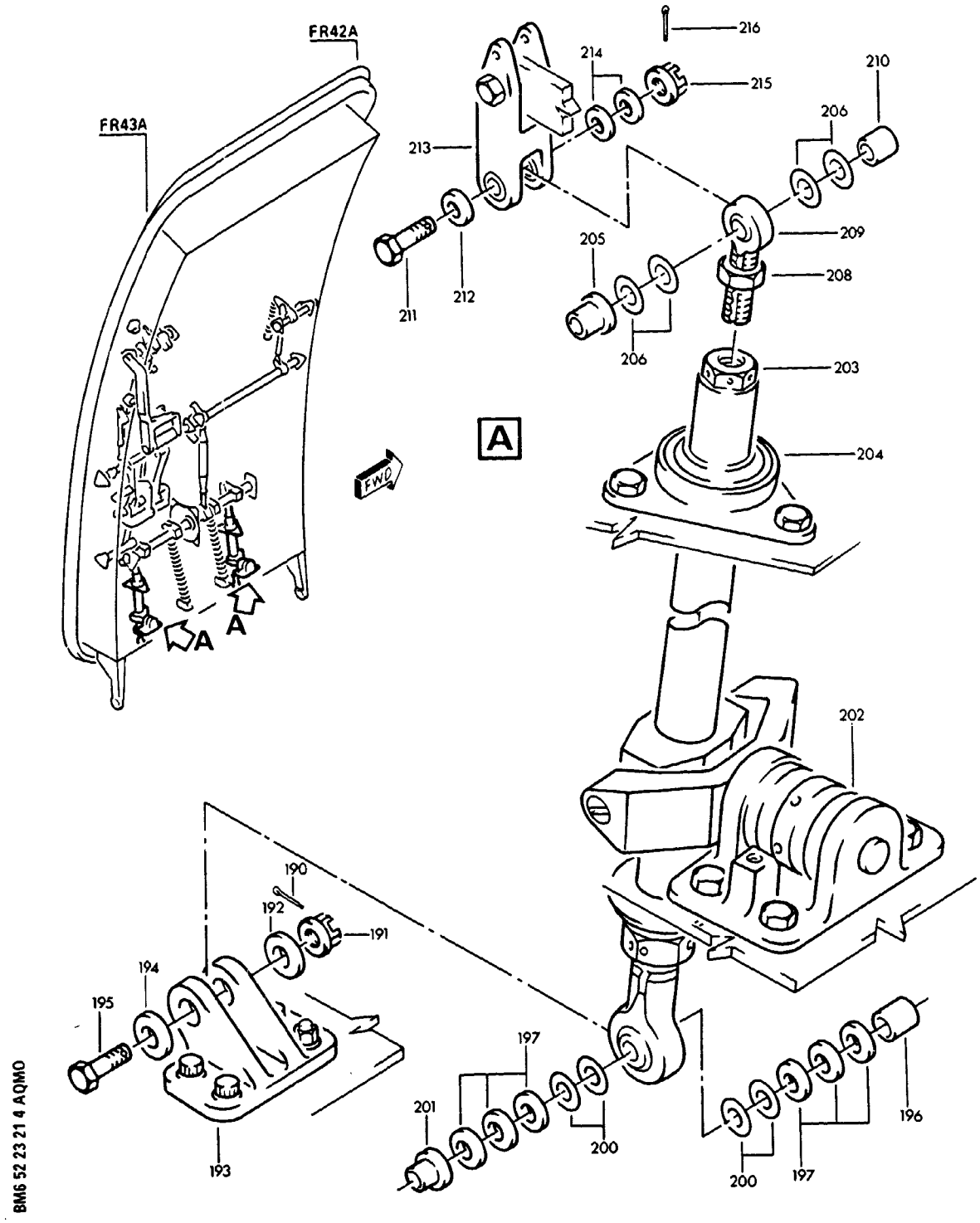
R CAUTION : DO NOT APPLY GREASE OR CLEANING AGENT (MAT. NO. 11-004) TO POLY-
R TETRAFLUOROETHYLENE (PTFE) COATED COMPONENTS OR TO AREAS OF
R COMPONENTS ATTACHED TO PTFE COATED COMPONENTS.

(1)Clean all components, except components coated with polytetrafluoroethylene (PTFE), with cleaning agent (Mat. No. 11-004).
(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).
(3)Unless otherwise stated, lubricate all moving parts, except components coated with PTFE, with grease (Mat. No. 04-004).
(4)Apply corrosion-preventive paste (Mat. No. 05-002) to all splined components before installation.
(5)Unless otherwise stated, a sealant bead (Mat. No. 09-019) must be applied to all static parts after installation (Ref. 51-76-10, P. Block 801).
(6)Check that drain holes in spring rod cylinder (157) are not blocked.

E. Installation

R CAUTION : MAKE CERTAIN THAT NO GREASE OR CLEANING AGENT
R PENETRATES COMPONENTS WITH PTFE COATINGS.

(1)Pushrod - Typical (Ref. Fig. 402)
(a)Install bushes (19, 20).
(b)Position pushrods (10, 11, 12, 13, 14, 15).
(c)Position washer (21), if installed.
(d)Install bolt (22), washer (18) and nut (17).
(e)Safety nut (17) with cotter pin (16).
(2)Interior Control Handle and Splined Shaft (Ref. Fig. 403)
NOTE : Levers (33, 34), splined shaft (35) and interior control handle (39) must be positioned as recorded on removal.
(a)Install splined bush (37) in bearing assembly (36).
(b)Position levers (33, 34) and install splined shaft (35).
(c)Apply corrosion-preventive paste (Mat. No. 05-002) to bolts (31).
(d)Install bolts (31) and nuts (32).
(e)Install washer (38), interior control handle (39), washers (40, 41, 42) and nut (43).
(f)TORQUE nut (43) to between 1.48 and 1.7 m.daN (130.9 and 150 lbf.in.).
(g)Install shim washers (29), washers (28, 27) and nut (26).
(h)TORQUE nut (26) to between 0.57 and 0.65 m.daN (50.4 and 57.5 lbf.in.).



Hinge Rods
Figure 409

(j)Make certain that gap 'a', between shim washer (29) and washer (28), is between 0.1 and 0.2 mm (0.004 and 0.008 in.). Should stated limits be exceeded, remove or install shim washers (29) as required.
(k)Safety nuts (26, 43) with cotter pins (25, 44).
(l)Connect pushrod (14) (Ref. Para. E. (1)).

(3)Locking Indicator (Ref. Fig. 401)
(a)Install washer (8), locking indicator (7), washer (6) and nut (5).
(b)Safety nut (5) with cotter pin (4).
(c)Connect pushrod (15) (Ref. Para. E. (1)).

(4)Exterior Control Handle and Splined Shaft (Ref. Fig. 404)
NOTE : Levers (52, 61, 64) and exterior control handle (58) must be positioned on splined shaft (57) as recorded on removal.
(a)Position levers (64, 61), packing (60), circlip (59) and external control handle (58).
(b)Position splined shaft (57) and slide fwd until circlip (59) can be installed.
(c)Install circlip (59).
(d)Position lockwasher (56) and nut (55).
(e)Slide splined shaft (57) fwd until packing (60) can be installed.
(f)Install packing (60).
(g)Slide splined shaft (57) fully fwd.
(h)Install washer (65) and shim washers (66).
(j)Tighten nut (55).
(k)Apply corrosion-preventive paste (Mat. No. 05-002) to bolts (62, 68).
(l)Install bolts (62) and nuts (63).
(m)Position bearing assembly (69), install bolts (68) and safety with nuts (67).
(n)Install shim washers (70), washers (71, 72, 73) and nut (74).
(p)TORQUE nut (74) to between 0.57 and 0.67 m.daN (50.4 and 59.3 lbf.in.).
(q)Make certain that gap between exterior control handle (58) and emergency exit external skin is equal. Adjust exterior control handle (58), as required, by removing or installing shim washers (66).
(r)Install shim washers (53), lever (52), washer (51) and bolt (50).
(s)Make certain that gap 'b', between shim washers (53) and bush of bearing assembly (54), is between 0.1 and 0.2 mm (0.004 and 0.008 in.). Adjust gap by removing or installing shim washers (53) as required.
(t)Make certain that gap 'c', between shim washer (70) and bush of bearing assembly (69), is between 0.1 and 0.2 mm (0.004 and 0.008 in.). Adjust gap by removing or installing shim washers (70) as required.
(u)Safety nut (74) with cotter pin (75).
(v)Safety bolt (50) with lockwire.
(w)Safety nut (55) with lockwasher (56).
(x)Connect pushrods (11, 13, 14, 15) (Ref. Para. E. (1)).

(5)Lowering Shafts (Ref. Fig. 405)

NOTE : Levers (84, 88, 101) and hook (102) must be positioned on lowering shafts (87, 98) as recorded on removal.

(a)Install upper lowering shaft (87).

1 Position lever (88) and install upper lowering shaft (87).
2 Apply corrosion-preventive paste (Mat. No. 05-002) to bolts (89, 83).
3 Install bolt (89) and nut (90).
4 Position bearing assembly (85), install bolts (83) and nuts (86).
5 Apply corrosion-preventive paste (Mat. No. 05-002) to splines of lever (84).
6 Install lever (84), washer (82) and nut (81).
7 Safety nut (81) with cotter pin (80).
8 Connect pushrod (10) (Ref. Para. E. (1)).
9 Position spring (78) and install pin (79) and washer (77).
10 Safety pin (79) with cotter pin (76).

(b)Install lower lowering shaft (98).

1 Apply corrosion-preventive paste (Mat. No. 05-002) to splines of lever (101), hook (102) and bolts (99, 95).
2 Position lever (101), hook (102), shim washers (103) and lowering shaft (98).
3 Install bolts (99) and nuts (100).
4 Position bearing assembly (97) and install bolts (95) and nuts (96).
5 Make certain that gap 'd', between shim washers (103) and hook (102), is not more than 0.2 mm (0.008 in.). Should stated limit be exceeded remove or install shim washers (103) as required.
6 Connect pushrod (10) (Ref. Para. E. (1)).

(6)Lifting Shaft (Ref. Fig. 406)

NOTE : Levers (112, 113, 114, 117, 118, 123) and lifting shaft (115) must be positioned as recorded on removal.

(a)Position levers (118, 117) and slide splined shaft (115) forward through access hole in exit frame and through splined bush in bearing assembly (116).
(b)Position levers (114, 113, 112) and bearing assembly (116).
(c)Install splined shaft (115).
(d)Apply corrosion-preventive paste (Mat. No. 05-002) to bolts (128).
(e)Position bearing assembly (116) and install bolts (128) and nuts (129).
(f)Apply corrosion-preventive paste (Mat. No. 05-002) to bolts (110, 121).
(g)Install bolts (110) and nuts (111).
(h)Position bearing assembly (119), install bolts (121) and nuts (120).
(j)Install spacer (122), lever (123), washer (124) and nut (125).
(k)TORQUE nut (125) to between 0.57 and 0.65 m.daN (50.4 and 57.5 lbf.in.).
(l)Safety nut (125) with cotter pin (126).
(m)Install lower roller fitting to aft exit frame.
(n)Connect tension springs of emergency exit lift mechanism.

1 Position rollers (137) and springs (3) in attach fittings (139).
2 Install pins (138), washers (136) and safety with cotter pins (135).

3 Install bushes (132).
4 Position springs (3), spring tension adjust washers (134), spacers (133) and cupwashers (131).
5 Install tension bolts (2).

(p)Connect pushrod (10) (Ref. Para. E. (1)).

(7)Lift Safety Lock Mechanism (Ref. Fig. 407)

(a)Apply corrosion-preventive paste (Mat. No. 05-002) to bolts (146).
(b)Position upper assembly (144) in exit, install bolts (146) and nuts (147).

CAUTION : INSTALL LARGER DIAMETER OF SPRING ROD CYLINDER AT UPPER POSITION.

(c)Install bushes (161, 162) and position spring rod cylinder (157).
(d)Position washer (160), install bolt (159), washer (163) and nut (164).
(e)Safety nut (164) with cotter pin (165).
(f)Position spring rod cylinder (157) on pivot (158) and install washer (156) and nut (155).
(g)Safety nut (155) with cotter pin (154).
(h)Position sleeve (173), washers (172, 170) and lever (171).
(j)Install shaft (169).
(k)Apply corrosion-preventive paste (Mat. No. 05-002) to bolt (174).
(l)Install bolt (174), washer (175) and nut (176).
(m)Make certain that gap 'e', between lever (171) and shim washer (172), is not more than 0.8 mm (0.03 in.). Should stated limit be exceeded, remove or install shim washer (172) as required.
(n)Connect pushrods (12, 13) (Ref. Para. E. (1)).
(p)Connect cable harness to microswitch at upper assembly (144).

** ON DOOR SERIAL NO. 1002-1096

(8)Hinge Rods (Ref. Fig. 409)

(a)Install bushes (205, 210) in link (213).
(b)Apply sealing grease (Mat. No. 05-001) to hinge rod (203).
(c)Slide hinge rod (203) through guide assembly (202) and bearing assembly (204).
(d)Install eye-end (209) in hinge rod (203).
(e)Tighten and safety locknut (208) with lockwire.
(f)Position hinge rod (203) and link (213).
(g)Install shim washers (206) as previously recorded.
(h)Position washer (212) and install bolt (211).
(j)Install washers (214) and nut (215).
(k)Safety nut (215) with cotter pin (216).
(l)Install bushes (196, 201) in hinge fitting (193).
(m)Position washers (197, 200), as previously recorded, and hinge rod (203).
(n)Apply sealant (Mat. No. 09-018) to plain shank of bolt (195) (Ref. 51-76-10, P. Block 801).
(p)Position washer (194) and install bolt (195), washer (192) and nut (191).
(q)Safety nut (191) with cotter pin (190).
(r)Cover nut (191) and head of bolt (195) with sealant (Mat. No. 09-019) (Ref. 51-76-10, P. Block 801).

** ON DOOR SERIAL NO. 1097 AND SUBSEQUENT

(8)Hinge Rods (Ref. Fig. 408)
(a)Install bushes (240, 245) in link (249).
(b)Install rubber covers (259, 260) if removed.
(c)Apply sealing grease (Mat. No. 05-001) to hinge rod (256).
(d)Slide hinge rod (256) through guide assembly (255) and bearing assembly (261).
(e)Position tabwashers (262, 263) and install eye-end (242) in hinge rod (256).
(f)Tighten and safety locknut (243) with lockwire.
(g)Position hinge (256) and link (249).
(h)Install shim washers (241) as previously recorded.
(j)Position washers (228) and install bolt (251).
(k)Install washers (228) and nut (247).
(l)Safety nut (247) with cotter pin (246).
(m)Install bushes (226, 235) in hinge fitting (223).
(n)Position washers (227, 230), as previously recorded and hinge rod (256).
(p)Apply sealant (Mat. No. 09-018) to plain shank of bolt (225) (Ref. 51-76-10, P. Block 801).
(q)Position washer (224) and install bolt (225), washer (222) and nut (220).
(r)Safety nut (220) with cotter pin (221).
(s)Cover nut (220) and head of bolt (225) with sealant (Mat. No. 09-019) (Ref. 51-76-10, P. Block 801).
(t)Install cable ties (258) if removed.

** ON ALL DOORS

F. Tension Springs of Exit Lift Compensation Mechanism (Ref. Fig. 401)
(1)Tighten tension bolts (2).
(2)Safety bolts (2) with lockwire (1).

G. Test

CAUTION : IF ANY COMPONENTS HAVE BEEN REMOVED OR REPLACED, AN ADJUSTMENT/TEST OF THE EMERGENCY EXIT MUST BE CARRIED OUT (REF. 52-23-11, P. BLOCK 501).

(1)Remove safety clips and tags and close circuit breakers 1WN, 2WN and 1WS.
(2)Close and open emergency exit and make certain that emergency exit operates smoothly and easily (Ref. 52-23-00, P. Block 301 and 52-23-00, P. Block 601).
(3)Carry out adjustment/test of emergency exit (Ref. 52-23-11, P. Block 501).
(4)Carry out adjustment/test of emergency exit warning switches (Ref. 52-71-11, P. Block 501).
(5)Carry out adjustment/test of emergency escape slide release warning (Ref. 52-73-13, P. Block 501).

H. Close-Up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove ballast weight.
(3)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(4)Apply grease (Mat. No. 04-017) to exterior control handle mechanism.
(5)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew as necessary (Ref. 51-75-10, P. Block 801).
(6)Install emergency exit insulation, if removed.
(7)Install access panels, if removed.
(8)Install emergency control handle, if removed (Ref. 52-23-22, P. Block 401).
(9)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(10)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(11)Close emergency exit (Ref. 52-23-00, P. Block 301).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(12)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(13)Remove supports and rubber mats.
(14)Remove access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : Apply corrosion-preventive paste (Mat. No. 05-002) to all bolts and screws before installation.

NOTE : The LH and RH emergency exit locking mechanisms are identical in design and function but are opposite hand. The LH locking mechanism only is described and illustrated.

1. Reasons for the Job

A. Adjustment and test of the following:
NOTE : Item numbers correspond with operations in procedure.
(1)Pushrods
(2)Interior control handle
(3)Lifting shaft stop
(4)Exterior control handle
(5)Locking indicator
(6)Lowering shafts
(7)Lift safety lock mechanism
(8)Tension springs

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D. 98A52207617000	Gage - Setting, Dead Center, Emergency Exit
E.	Spring Balance, up to 20.0 daN (45.0 lbf.)
F.	Rubber Mats
G.	Corrosion-Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
H.	Shimwashers
J.	Rigging Pin 4.0 mm (0.16 in.) dia.
K. Material No. 04-017	Common Greases (Ref. 20-31-00)
L. Material No. 05-002	Special Materials (Ref. 20-31-00)
M. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 25-23-41, P. Block 401	Door Frame Linings
- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-21, P. Block 401	Locking Mechanism
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism
- 52-23-22, P. Block 501	Emergency Escape Slide Release Mechanism
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Remove emergency control handle, if necessary (Ref. 52-23-22, P. Block 401).
(8)Remove access panels, as required.
(9)Remove emergency exit insulation, if necessary.
(10)Install ballast weight P/N 98A52207607000 (P/N 98A52207614000).
(11)Close emergency exit (Ref. 52-23-00, P. Block 301).

B. Adjustment/Test

(1)Adjustment of Pushrods
(Ref. Fig. 501)

(a)Cut and remove lockwire (1) from locknut (2).

(b)Release locknuts (2).

(c)Adjust pushrod (3, 4, 5, 6, 7, 8) as required.

(d)Tighten locknuts (2) and safety with lockwire (1).

(2)Adjustment of Interior Control Handle
(Ref. Fig. 501, 502, 503)

(a)Remove pushrod (4) (Ref. 52-23-21, P. Block 401).

(b)With interior control handle (40) in closed position, insert rigging pin (41) through interior control handle (40) and emergency exit frame.

(c)If rigging pin (41) cannot be inserted, or if a gap exists between interior control handle (40) and lower stop bolt (44), proceed as follows:

1 Move interior control handle (40) towards open position.

2 Remove locknut (42) and lower stop bolt (44).

3 Install or remove shims (43) as required.

4 Install lower stop bolt (44) and locknut (42).

5 Close interior control handle (40).

6 Insert rigging pin (41) and check that no gap exists between interior control handle and lower stop bolt (44).

(d)Position setting gage (P/N 98A52207617000) and install lower rigging pin 8.5 mm (0.33 in.) dia.

(e)Install upper rigging pin 8.5 mm (0.33 in.) dia. of setting gage.

(f)Install upper rigging pin 21.8 mm (0.86 in.) dia. of setting gage. Lower rigging pin should be between limits T4 and T5 of setting gage. If rigging pin 21.8 mm (0.86 in.) dia. of setting gage cannot be installed, proceed as follows:

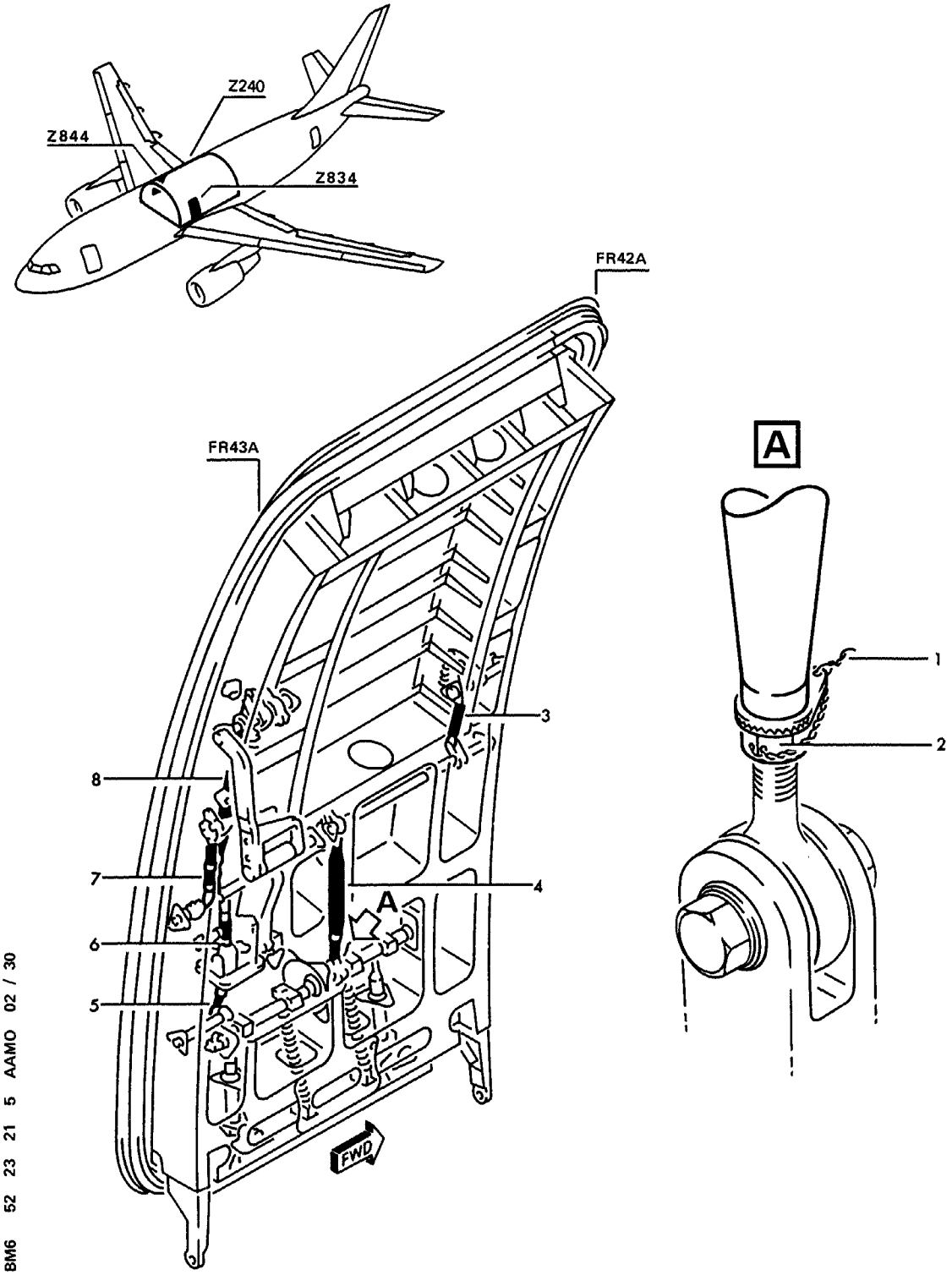
1 Adjust pushrod (8) until upper rigging pin 21.8 mm (0.86 in.) dia. can be easily installed (Ref. Para. 3.B.(1)).

(g)Remove setting gage.

(h)Check that gap 'd', between cam of lever (51) and stop screw (52), is 0.1 mm (0.004 in.). Should stated limit be exceeded, proceed as follows:

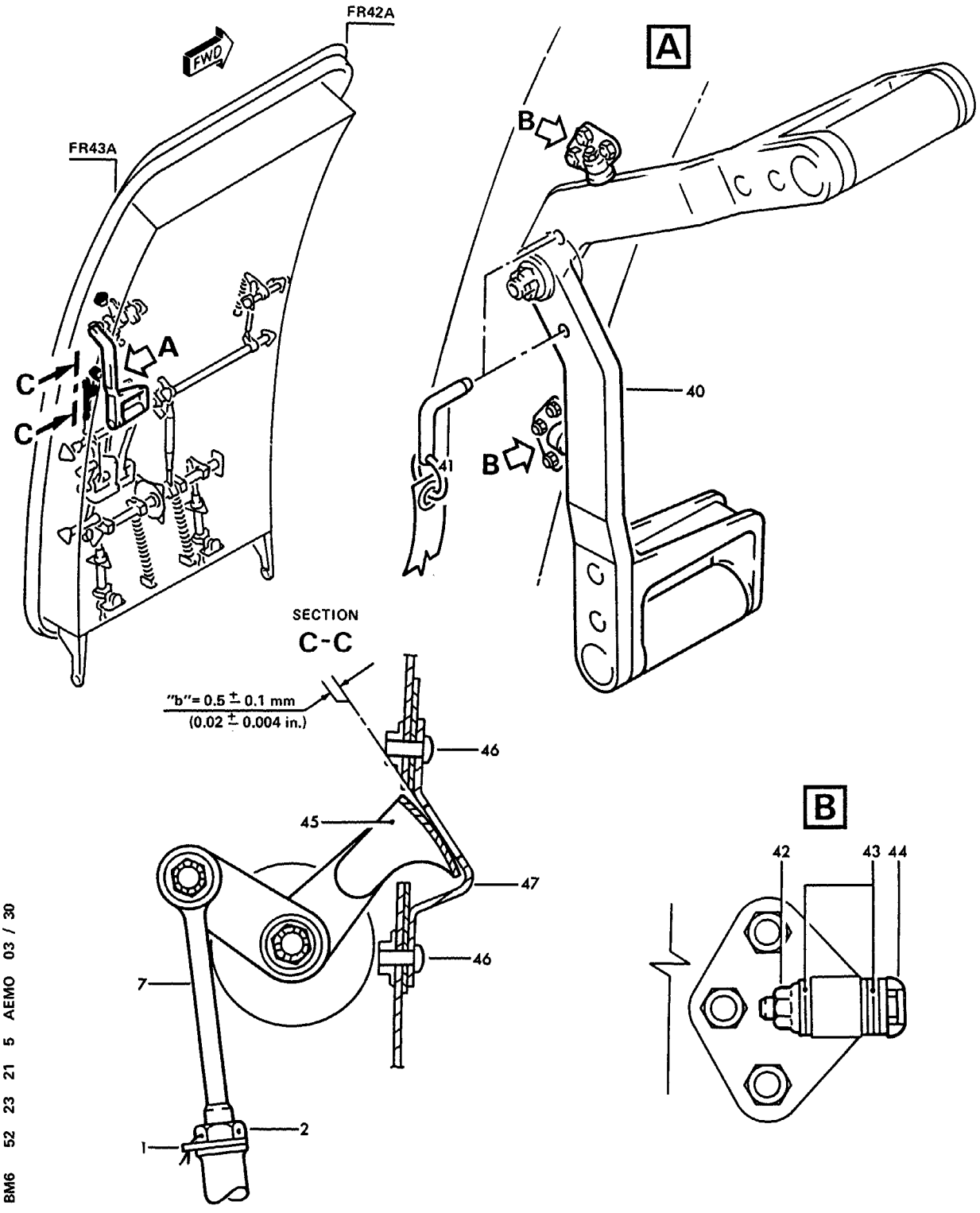
1 Cut and remove lockwire (54) from locknut (53).

2 Release locknut (53).

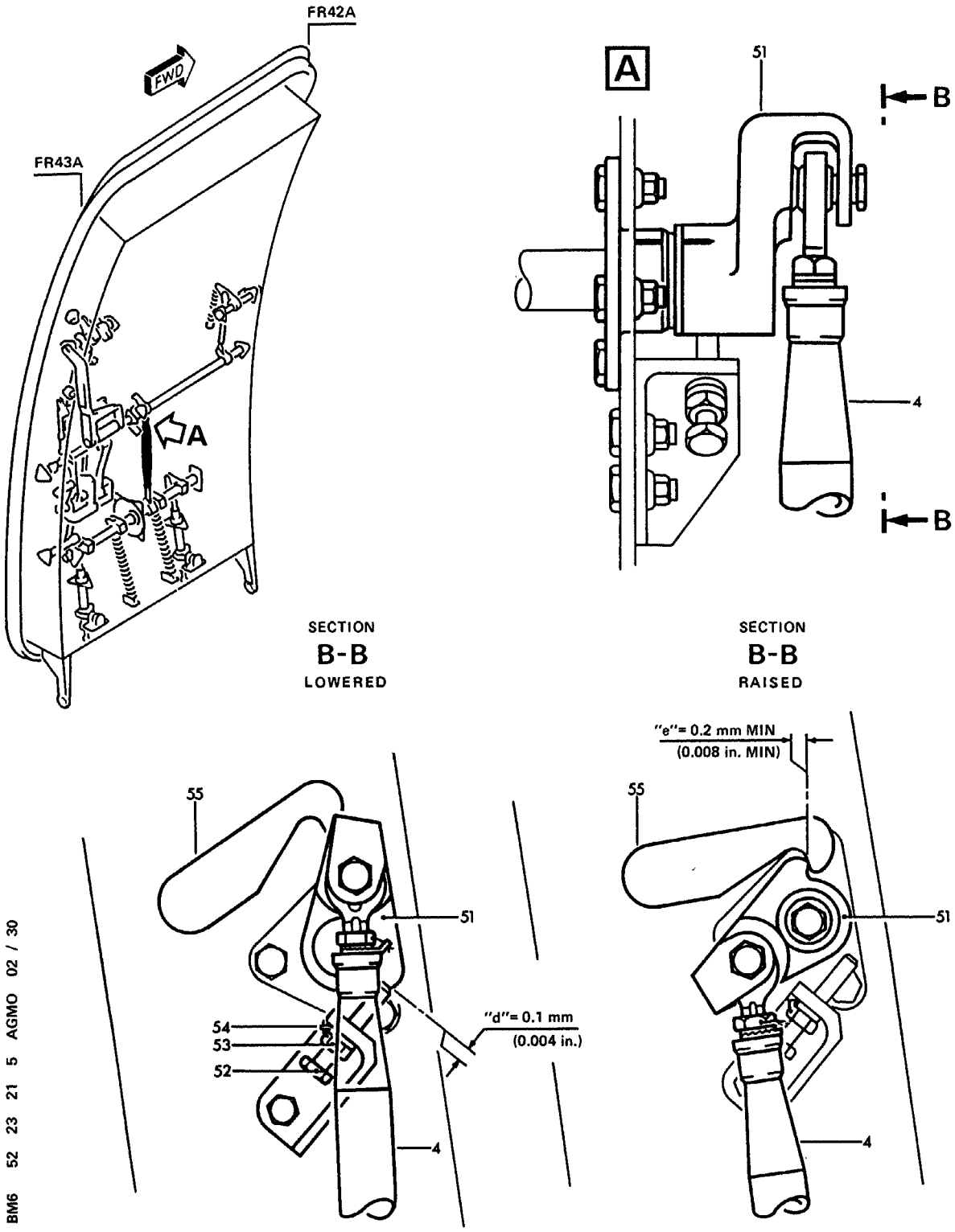


BM6 52 23 21 5 AAMO 02 / 30

Pushrods
Figure 501



Interior Control Handle and Locking Indicator
Figure 502



Interior Control Handle
Figure 503

3 Adjust stop screw (52), as required, until gap 'd' is 0.1 mm (0.004 in.).
4 Tighten locknut (53).
5 Safety locknut (53) with lockwire (54).

(j) Remove rigging pin (41) and operate interior control handle (40). Make certain that interior control handle (40) operates smoothly.

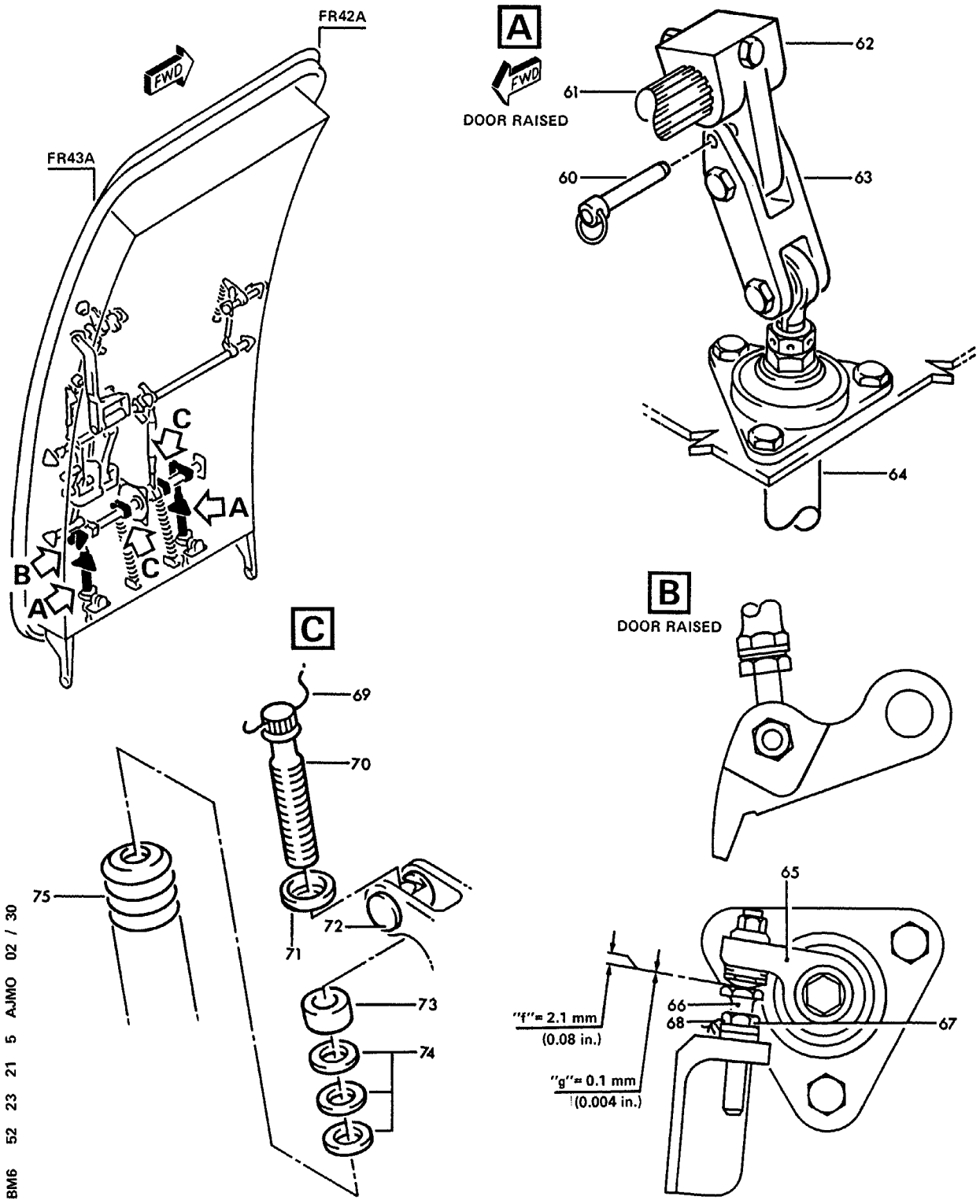
(k) With interior control handle (40) in open position, insert rigging pin (41) through interior control handle (40) and emergency exit frame.

(l) If rigging pin (41) cannot be inserted, or if a gap exists between interior control handle (40) and upper stop bolt (44), proceed as follows:

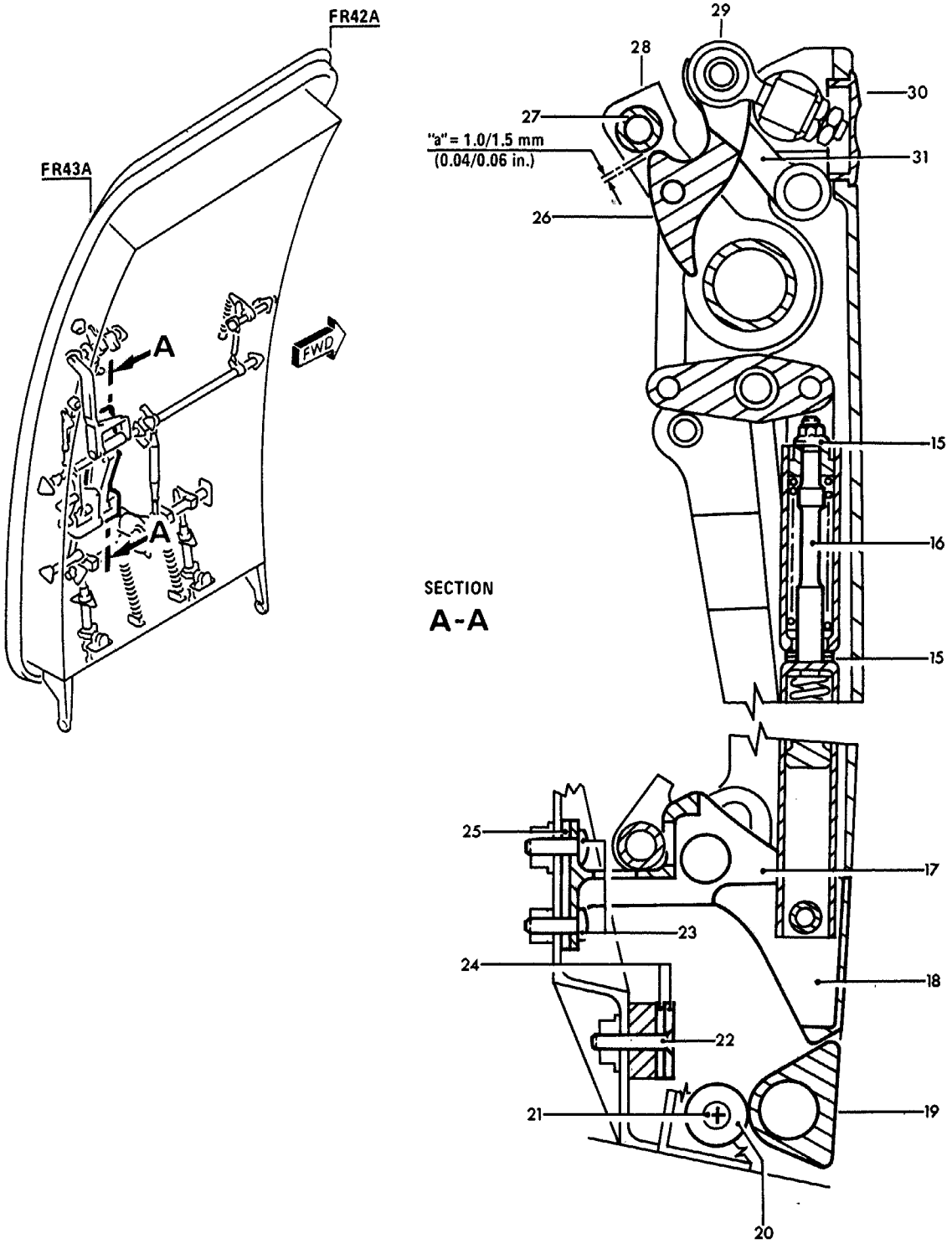
1 Move interior control handle (40) towards closed position.
2 Remove locknut (42) and upper stop bolt (44).
3 Install or remove shims (43) as required.
4 Install upper stop bolt (44) and locknut (42).
5 Move interior control handle (40) to open position.
6 Insert rigging pin (41) through interior control handle (40) and emergency exit frame and check that no gap exists between interior control handle and upper stop bolt (44).
7 Remove rigging pin (41).

(3)Adjustment of Lifting Shaft Stop
(Ref. Fig. 501, 502, 504)
(a)Make certain that interior control handle (40) is correctly adjusted (Ref. Para. 3.B. (2)), and that pushrod (4) is removed (Ref. 52-23-21, P. Block 401).
(b)Raise and support emergency exit.
(c)Insert rigging pins (60) through links (63), at top end of hinge rods (64), and levers (62) on lifting shaft (61).
(d)Check that gap 'f', between stop screw (66) and stop of lever (65), is 2.1 mm (0.08 in.). Should stated limit be exceeded, proceed as follows:
1 Cut and remove lockwire (68) from locknut (67).
2 Release locknut (67) and adjust stop screw (66) as required.
3 Tighten locknut (67) and safety with lockwire (68).
WARNING : EMERGENCY EXIT CAN DROP.
(e)Remove rigging pins (60) from links (63) and levers (62) and lower emergency exit.
(f)Move interior control handle (40) to closed position.
(g)Install pushrod (4).
(h)Move interior control handle (40) to open position.
(j)Insert rigging pin (41) through interior control handle (40) and emergency exit frame.
(k)Check that gap 'g', between stop screw (66) and stop of lever (65), is 0.1 mm (0.004 in.). Should stated limit be exceeded, pushrod (4) must be adjusted (Ref. Para. 3.B. (1)).
(l)Check that gap 'e', between hook (55) and cam of lever (51), is not less than 0.2 mm (0.008 in.). Should stated limit be exceeded, hook (55) must be reworked and/or lowering shafts adjusted (Ref. Para. 3.B. (6)).
(m)Remove rigging pin (41) from interior control handle (40) and emergency exit frame.

(4)Adjustment of Exterior Control Handle
(Ref. Fig. 505, 502, 504)
(a)Make certain that items listed in Para. 3.B.(2) and (3) are correctly adjusted.
(b)Open emergency exit (Ref. 52-23-00, P. Block 301).
(c)Close emergency exit and lock using interior control handle (40) (Ref. 52-23-00, P. Block 301).
(d)Remove plug (30) and make certain that lever (28) just contacts lever (31). Adjust rod (29), if necessary.
(e)Make certain, by pushing exterior control handle (19) at lowest point, that exterior control handle (19) is flush with emergency exit exterior skin. If exterior control handle (19) is not flush with emergency exit skin, proceed as follows:
1 Open exterior control handle (19).
2 Remove bolts (23), latch fitting (17) and shims (25).
3 Release bolt (21), rotate eccentric stop (20) as required.
4 Tighten bolt (21).
(f)Close exterior control handle (19), using interior control handle (40), and make certain that flap (18) returns towards closed position. If flap (18) does not return towards closed position, proceed as follows:
1 Open exterior control handle (19).
2 Remove bolts (22).
3 Install shims (24), as required, and install bolts (22).
4 Position shims (25) and latch fitting (17).
5 Install bolts (23).
(g)Close exterior control handle (19), using interior control handle (40), and make certain that flap (18) returns flush with exterior skin of exterior control handle (19). If flap (18) does not return to flush position, proceed as follows:
1 Open exterior control handle (19).
2 Remove bolts (23) and latch fitting (17).
3 Install shims (25) as required.
4 Position latch fitting (17) and install bolts (23).
5 Close exterior control handle (19) using interior control handle (40).
(h)Move interior control handle (40) to open position and check that gap 'a', between hook (26) and roller (27), is between 1.0 and 1.5 mm (0.04 and 0.06 in.). Should stated limits be exceeded, adjust rod (16) by removing/installing shimwashers (15) as required.
(j)Check that gap 'g', between stop screw (66) and stop of lever (65), is 0.1 mm (0.004 in.). Should stated limit be exceeded, pushrod (4) must be adjusted (Ref. Para. 3.B.(1)).
(k)Close emergency exit (Ref. 52-23-00, P. Block 301).
(l)Install plug (30).



Lifting Shaft and Tension Springs
Figure 504



BM6 52 23 21 5 ACMO

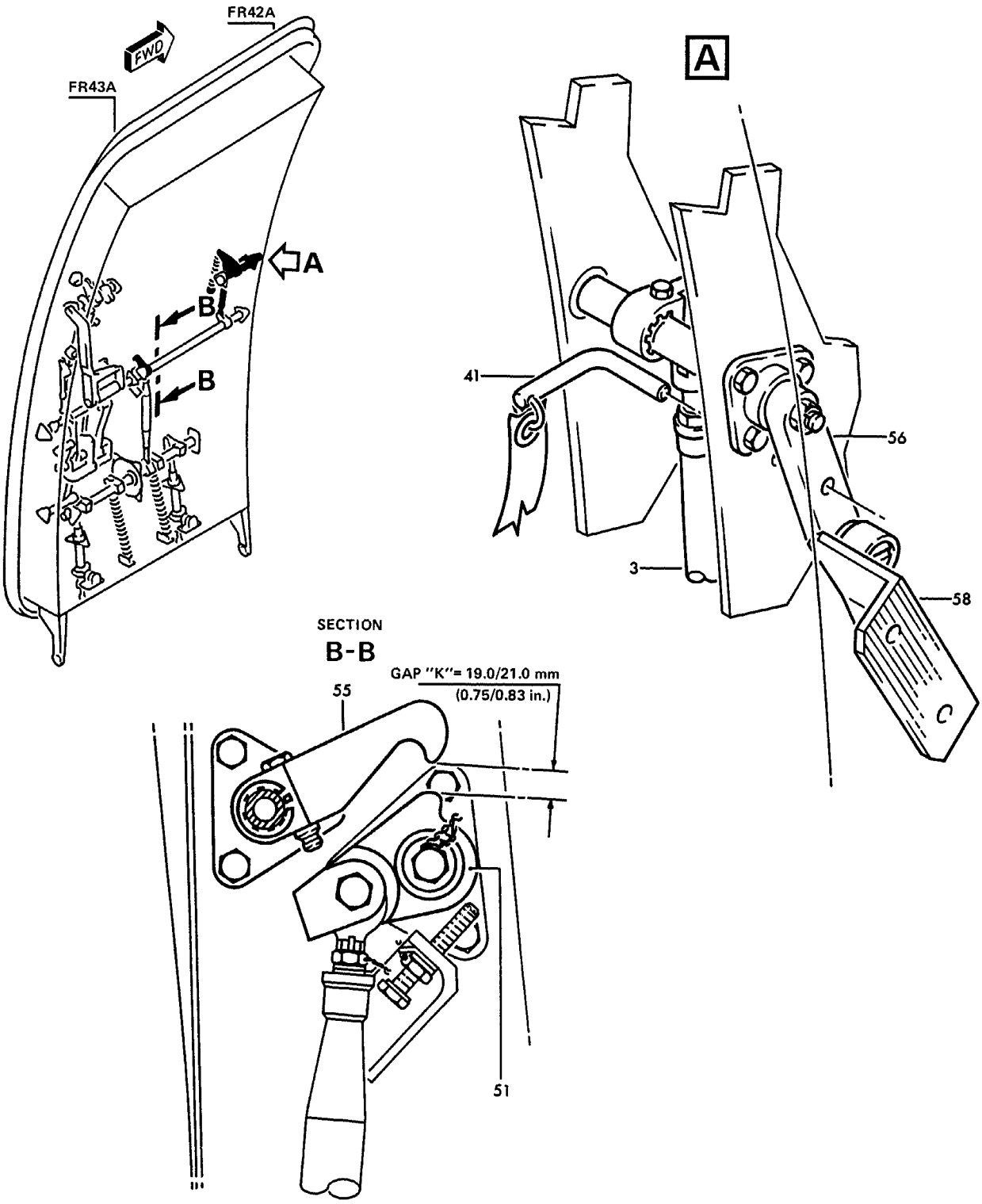
Exterior Control Handle
Figure 505

(5)Adjustment of Locking Indicator
(Ref. Fig. 502)
(a)Make certain that items listed in Para. 3.B. (2) thru 3.B. (4) are correctly adjusted.
(b)With emergency exit in closed position, check that gap 'b', between locking indicator (45) and locking indicator cover (47), is 0.5 ± 0.1 mm (0.02 ± 0.004 in.). Should stated limits be exceeded, proceed as follows:
1 Loosen screws (46) and adjust locking indicator cover (47) as required.
2 Tighten screws (46).
(c)Check that alignment marks on locking indicator (45) are aligned with lower edge of aperture in locking indicator cover (47). If locking indicator (45) and locking indicator cover (47) are not aligned, proceed as follows:
1 Cut and remove lockwire (1) from locknuts (2) on pushrod (7).
2 Release locknuts (2) and adjust pushrod (7) as required.
3 Tighten locknuts (2) and safety with lockwire (1).

(6)Adjustment of Lowering Shafts
(Ref. Fig. 501, 506)
(a)Make certain that items listed in Para. 3.B. (2) thru 3.B. (5) are correctly adjusted.
(b)Open emergency exit (Ref. 52-23-00, P. Block 301).
(c)Push lever (56) until rigging pin (41) can be installed.
(d)Check that gap 'K', between hook (55) and cam (51), is between 19.0 and 21.0 mm (0,75 and 0,83 in.). Should stated limits be exceeded pushrod (3) must be adjusted (Ref. Para. 3.B (1)).
(e)Remove rigging pin (41).
(f)For adjustment of lever (56) and lowering stop (58) refer to 52-23-11, P. Block 501.
(g)Close emergency exit (Ref. 52-23-00, P. Block 301).

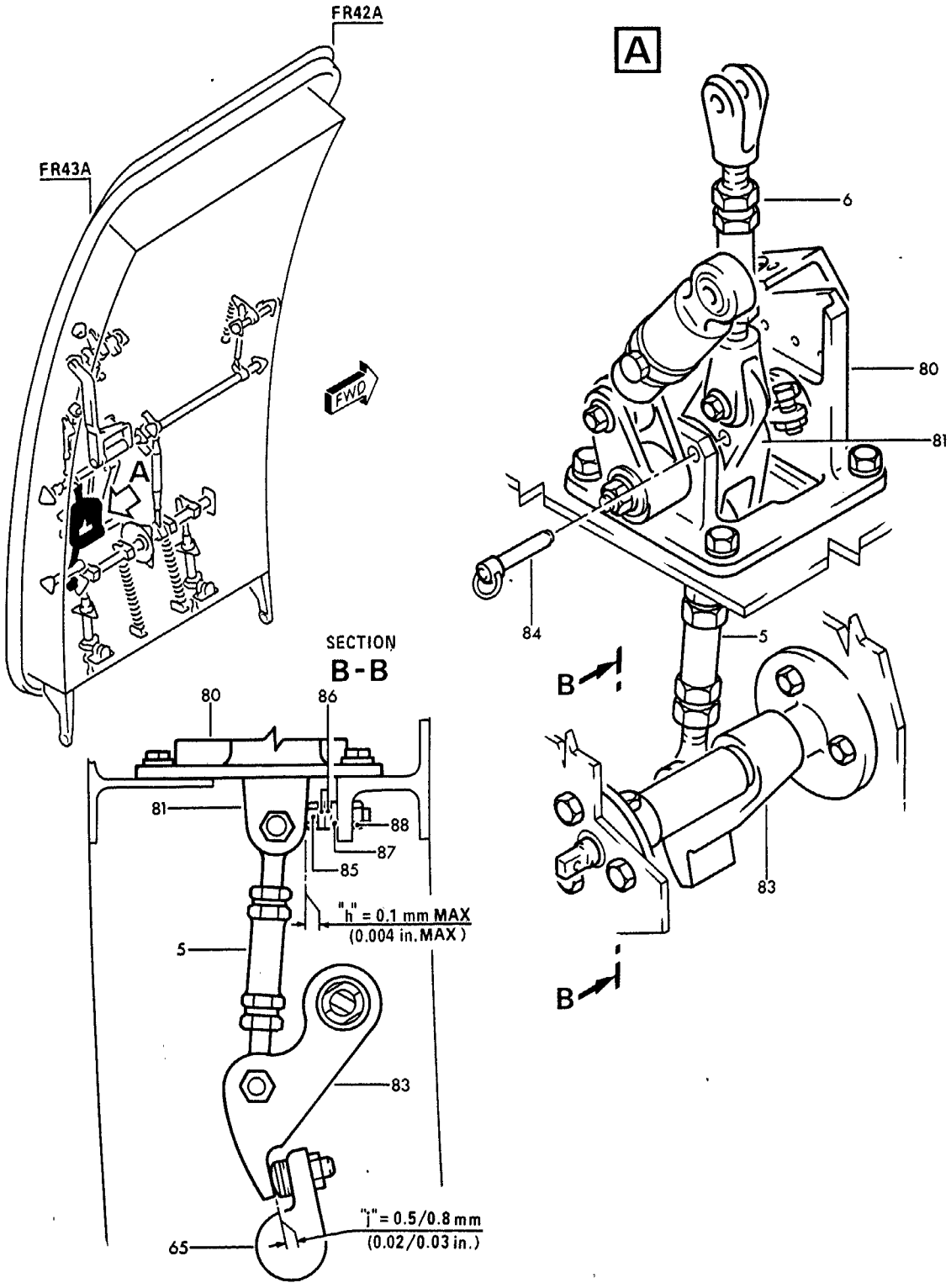
(7)Adjustment of Lift Safety Lock Mechanism
(Ref. Fig. 501, 507)
(a)Make certain that items listed in Para. 3.B. (2) thru 3.B. (6) are correctly adjusted.
(b)Remove pushrod (6) (Ref. 52-23-21, P. Block 401).
(c)Insert rigging pin (84) through housing (80) and double lever (81).
(d)Check that gap 'h', between double lever (81) and stop bolt (85), is not more than 0.1 mm (0.004 in.). Should stated limit be exceeded, proceed as follows:
1 Remove rigging pin (84) and raise emergency exit.
2 Remove locknut (88), stop bolt (85), shimwashers (86) and washers (87).
3 Install or remove shimwashers (86) as required.
4 Position washers (87), shimwashers (86) and stop bolt (85).
5 Install locknut (88).
6 Lower emergency exit and install rigging pin (84).
(e)Check that gap 'j', between levers (65, 83), is between 0.5 and 0.8 mm (0.02 and 0.03 in.). Should stated limits be exceeded, proceed as follows:
1 Cut and remove lockwire (1) from locknuts (2) on pushrod (5).
2 Release locknuts (2) and adjust pushrod (5) as required.
3 Tighten locknuts (2) and safety with lockwire (1).
(f)Install pushrod (6). Adjust pushrod (6) for installation, if necessary.
(g)Remove rigging pin (84) from double lever (81) and housing (80).

(8)Adjustment of Tension Springs
(Ref. Fig. 501, 502, 504)
(a)Make certain that items listed in Para. 3.B. (2) thru 3.B. (7) are correctly adjusted.
(b)Attach spring balance to interior control handle (40).
(c)Check that forces required to open and close interior control handle (40) are approx. equal and do not exceed 15.0 daN (33.7 lbf.). Should stated limit be exceeded, proceed as follows:
1 Raise emergency exit.
2 Cut and remove lockwire (69) from tension bolt (70).
3 Remove tension bolt (70), washer (71), bush (73) and washers (74).
4 Install or remove washers (74) as required.
5 Position spring (75), washers (74) and bush (73).
6 Make certain bush (72) is in position and install tension bolt (70).
7 Safety tension bolt (70) with lockwire (69).
8 Lower emergency exit.



BM6 52 23 21 5 ANMO 02 / 30

Lowering Shafts
Figure 506



Lift Safety Lock Mechanism
Figure 507

(9)Test
(a)Carry out the following adjustment/test procedures:
1 Emergency exit (Ref. 52-23-11, P. Block 501).
2 Emergency escape slide release mechanism (Ref. 52-23-22, P. Block 501).
3 Exit warning (Ref. 52-71-11, P. Block 501).
4 Emergency escape slide release warning (Ref. 52-73-13, P. Block 501).

(10)Close-Up
(a)Open emergency exit (Ref. 52-23-00, P. Block 301).
(b)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(c)Remove ballast weight.
(d)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(e)Apply grease (Mat. No. 04-017) to exterior control handle machism.
(f)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew if necessary (Ref. 51-75-10, P. Block 801).
(g)Install emergency exit insulation, if removed.
(h)Install access panels, if removed.
(j)Install emergency control handle, if removed (Ref. 52-23-22, P. Block 401).
(k)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(l)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(m)Install emergency exit fuselage frame linings, if removed (Ref. 25-23-41, P. Block 401).
(n)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(p)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(q)Remove rubber mats.
(r)Remove access platform.

LOCKING MECHANISM - INSPECTION/CHECK

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exit locking mechanisms are identical in design and function but are opposite hand. The LH locking mechanism only is described.

NOTE : Should a defect be suspected during the following inspection/ check, an approved nondestructive test must be carried out. If a defect is subsequently proved to exist, a structural repair must be carried out, or component must be replaced.

1. Reasons for the Job

A. Inspection to determine locking mechanism is free from damage

B. Check of locking mechanism operation

C. Check of fits and clearances

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D.	Rubber Mats
E.	Supports
F. Material No. 04-017	Common Greases (Ref. 20-31-00)
G. Material No. 05-001	Special Materials (Ref. 20-31-00)
H. Material No. 05-002	Special Materials (Ref. 20-31-00)
J. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-21, P. Block 401	Locking Mechanism
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Remove emergency control handle (Ref. 52-23-22, P. Block 401).
(8)Remove access panels.
(9)Remove emergency exit insulation, if necessary.

** ON DOOR SERIAL NO. 1002-1096

(10)Not applicable

** ON DOOR SERIAL NO. 1097 AND SUBSEQUENT

(10)Remove cable ties and loosen rubber covers at hinge rods.

** ON ALL DOORS

(11)Install emergency exit ballast weight P/N 98A52207607000 (98A52207614000).

B. Inspection/Check of Locking Mechanism
(1)Inspect locking mechanism for damage.
(2)Check that locking mechanism and hardware are secure and safetied.
(3)Inspect complete locking mechanism for:
(a)Corrosion. For the removal of corrosion refer to 51-74-10, P. Block 801.
(b)Scratches, marks and dents. For the removal to scratches, marks and dents refer to 51-73-10, P. Block 801.
(c)Satisfactory paint coating. For the repair of paint coatings refer to 51-75-10, P. Block 801.
(d)Pay special attention to deformation and cracks of fork end fittings.
(e)Deformation, cracks. Deformed and cracked parts must be replaced.
(4)Check sealant for condition and serviceability. Renew sealant if necessary (Ref. 51-76-10, P. Block 801).

** ON DOOR SERIAL NO. 1002-1096

(5)Not applicable

** ON DOOR SERIAL NO. 1097 AND SUBSEQUENT

(5)Check hinge rod rubber covers for good condition and renew, if necessary (Ref. 52-23-21, P. Block 401).

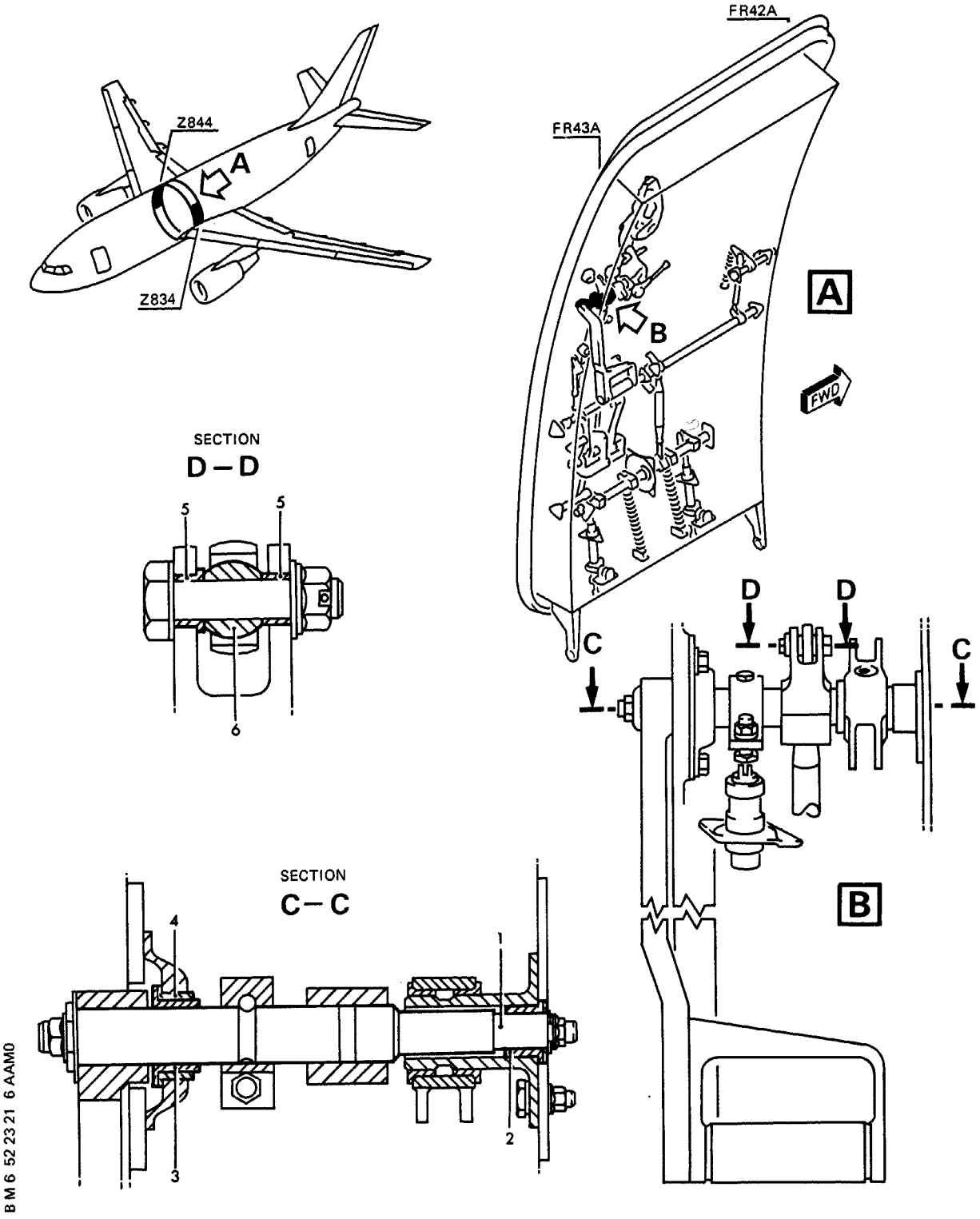
** ON ALL DOORS

C. Measurement of Fits and Clearances
(1)Remove locking mechanism as required (Ref. 52-23-21, P. Block 401).
(2)Carry out check of fits and clearances (Ref. Table 601 thru 605).
NOTE : Figure 1) in any column denotes a PTFE coated component.

Fits and Clearances (Ref. Fig. 601)

Detail and Item No.	Original Mfg. Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
C-C OD1	12.680 (0.4992)	12.688 (0.4995)			12.670 (0.4988)		
			0.027 (0.0011)	0.061 (0.0024)			
C-C ID2	12.715 (0.5006)	12.741 (0.5016)				1)	
C-C OD3	25.384 (0.9994)	25.405 (1.0002)			25.353 (0.9981)		
			0.020 (0.0008)	0.072 (0.0028)			
C-C ID4	25.425 (1.0010)	25.456 (1.0022)				1)	
D-D ID5	6.350 (0.2499)	6.365 (0.2506)				6.386 (0.2514)	
D-D ID6	6.337 (0.2495)	6.388 (0.2515)				6.427 (0.2530)	

Table 601

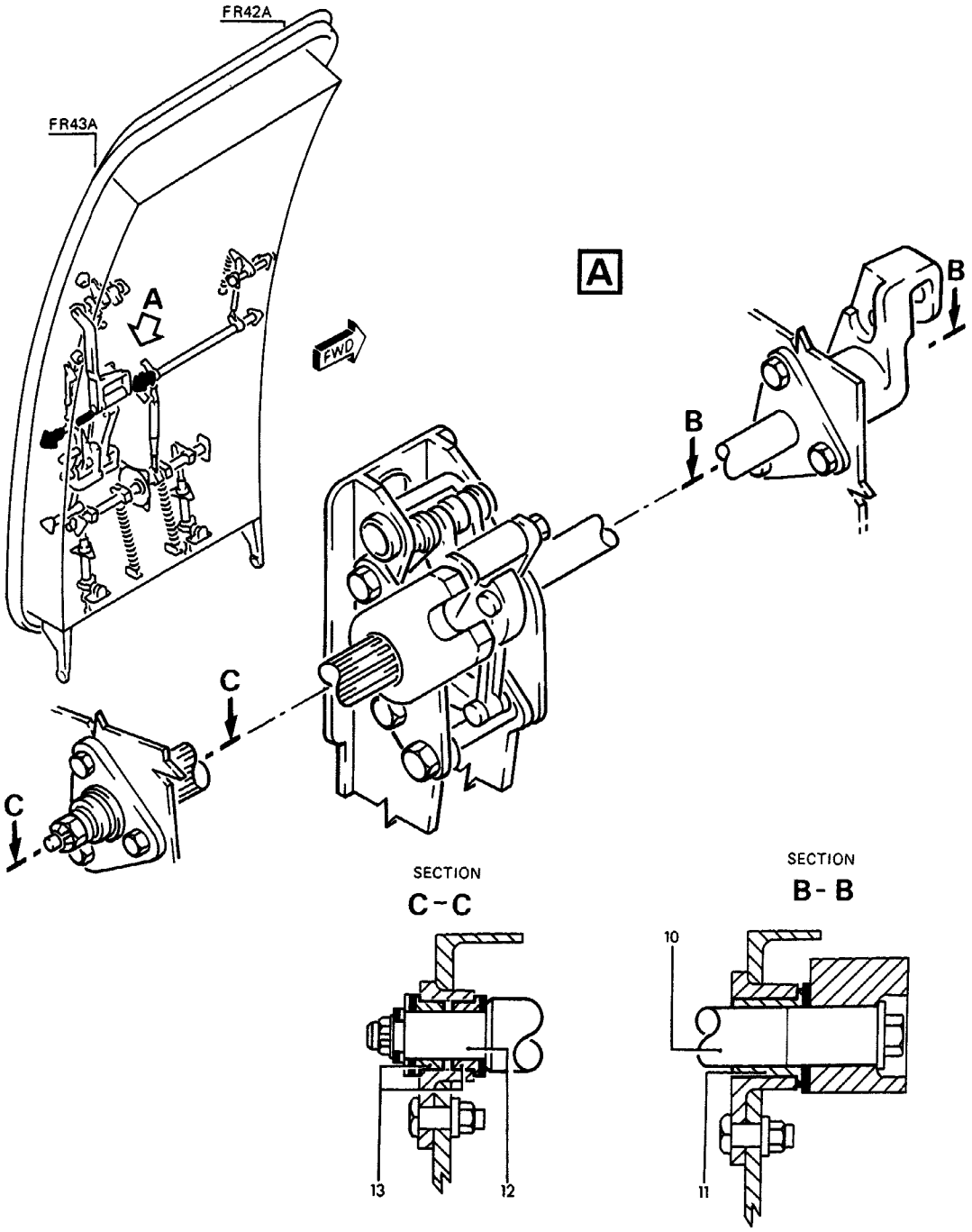


Pushrod and Interior Control Handle
Figure 601

Fits and Clearances (Ref. Fig. 602)

Detail and Item No.	Original Mfg. Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B OD10	16.983 (0.6686)	16.994 (0.6691)			16.967 (0.6680)		
			0.006 (0.0002)	0.035 (0.0014)			0.076 (0.0030)
B-B ID11	17.000 (0.6693)	17.018 (0.6699)				17.043 (0.6710)	
C-C OD12	12.681 (0.4993)	12.699 (0.5000)			12.656 (0.4983)		
			0.016 (0.0006)	0.060 (0.0024)			
C-C ID13	12.715 (0.5006)	12.741 (0.5016)				1)	

Table 602



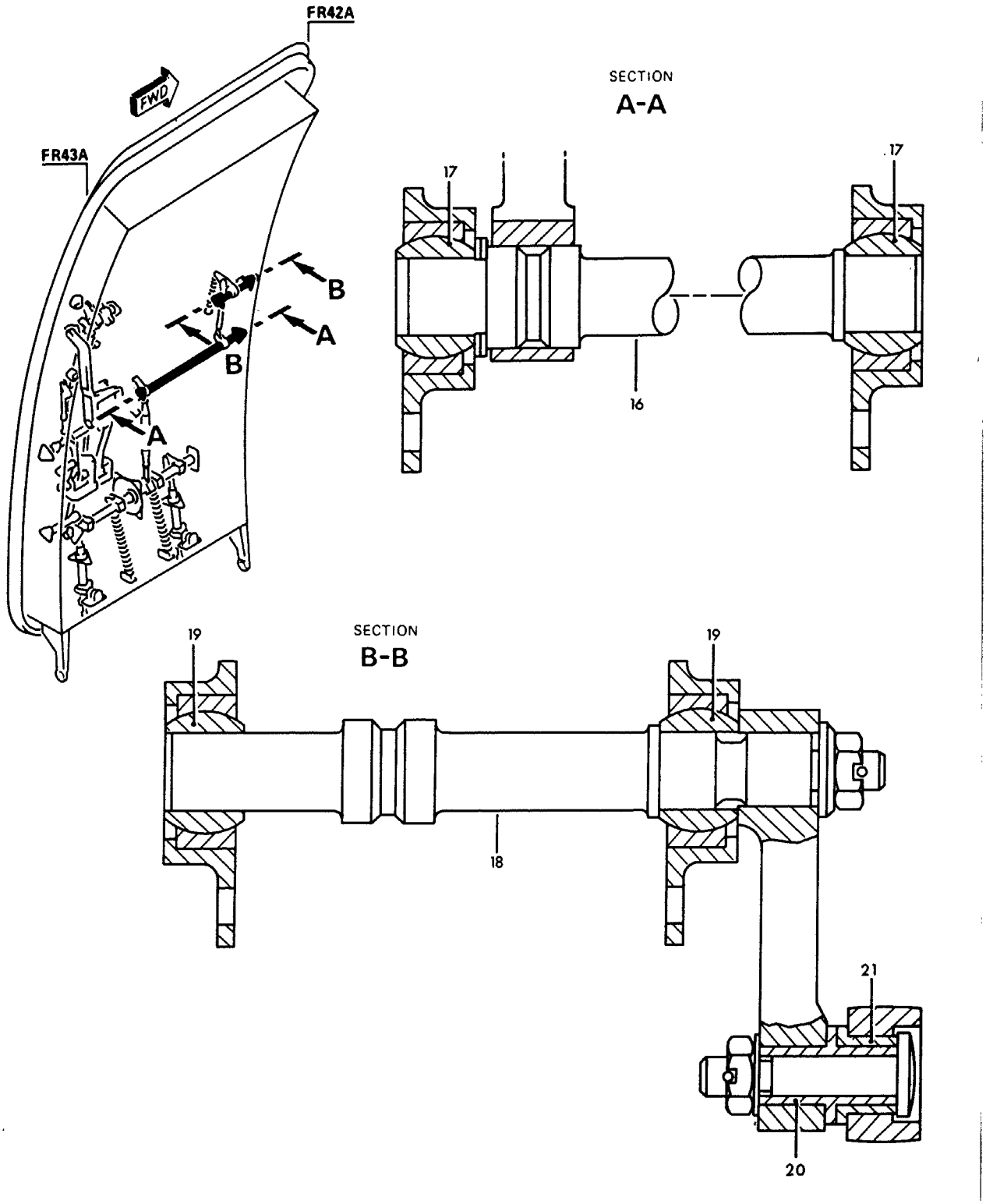
B M 6 52 23 21 6 ACM0

Splined Shaft
Figure 602

Fits and Clearances (Ref. Fig. 603)

Detail and Item No.	Original Mfg. Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A-A OD16	12.683 (0.4993)	12.694 (0.4998)			12.667 (0.4987)		
			0.007 (0.0003)	0.017 (0.0007)			0.053 (0.0021)
A-A ID17	12.687 (0.4995)	12.700 (0.5000)				12.720 (0.5008)	
B-B OD18	12.683 (0.4993)	12.694 (0.4998)			12.667 (0.4987)		
			0.007 (0.0003)	0.017 (0.0007)			0.053 (0.0021)
B-B ID19	12.687 (0.4995)	12.700 (0.4999)				12.720 (0.5008)	
B-B OD20	9.497 (0.3739)	9.512 (0.3745)			9.490 (0.3736)		
			0.028 (0.0011)	0.066 (0.0026)			
B-B ID21	9.540 (0.3756)	9.563 (0.3765)				1)	

Table 603

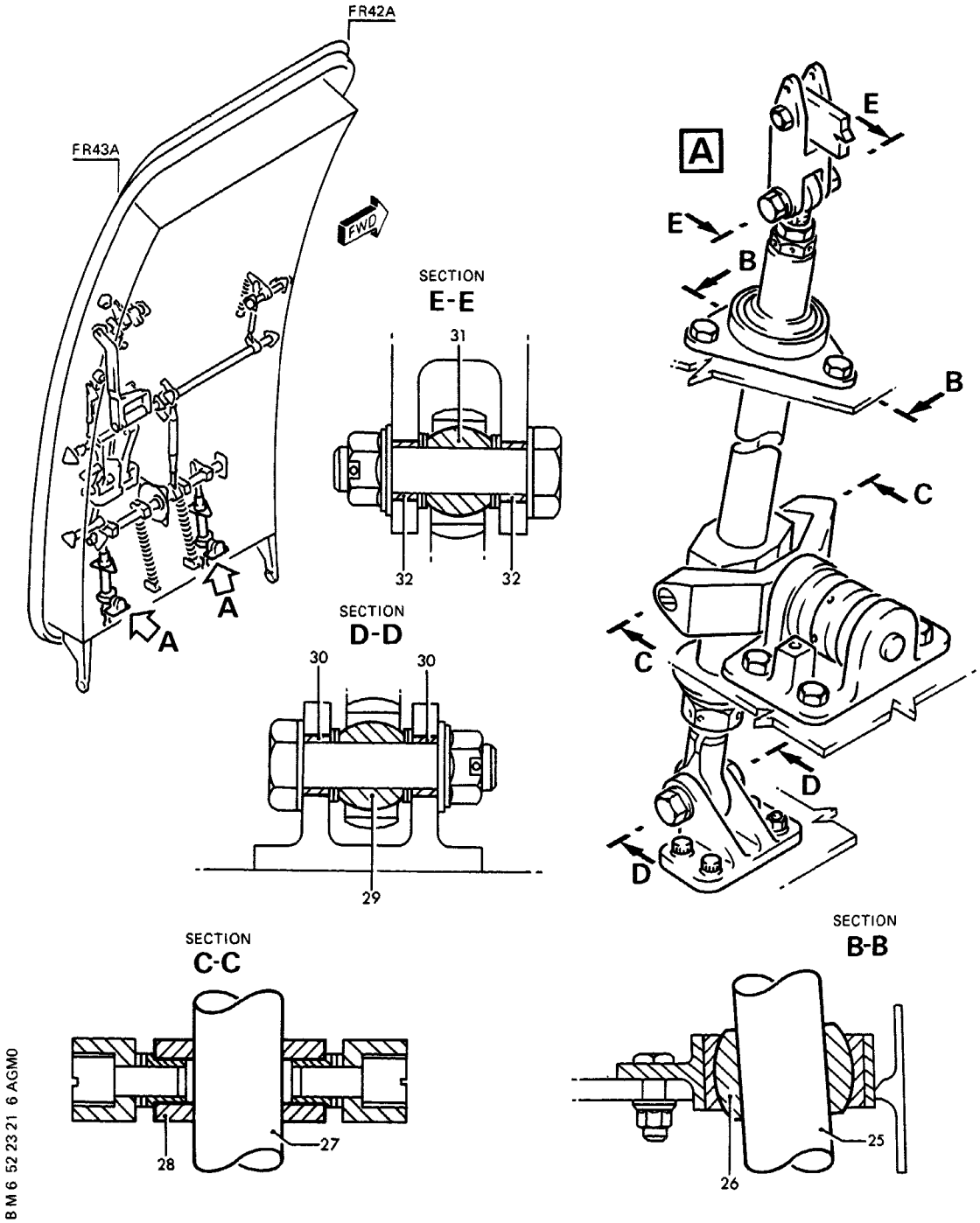


Lowering Shafts
Figure 603

Fits and Clearances (Ref. Fig. 604)

Detail and Item No.	Original Mfg. Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B OD25	22.184 (0.8734)	22.205 (0.8742)			22.172 (0.8729)		
			0.007 (0.0003)	0.041 (0.0016)			0.105 (0.0041)
B-B ID26	22.212 (0.8743)	22.225 (0.8750)				22.277 (0.8770)	
C-C OD27	22.184 (0.8734)	22.205 (0.8742)			22.172 (0.8729)		
			0.020 (0.0008)	0.062 (0.0024)			0.105 (0.0041)
C-C ID28	22.225 (0.8750)	22.246 (0.8758)				22.277 (0.8770)	
D-D ID29	9.512 (0.3745)	9.525 (0.3750)				9.546 (0.3758)	
D-D ID30	9.510 (0.3744)	9.525 (0.3750)				9.546 (0.3758)	
E-E ID31	7.925 (0.3120)	7.938 (0.3125)				7.958 (0.3133)	
E-E ID32	7.937 (0.3125)	7.952 (0.3131)				7.973 (0.3139)	

Table 604

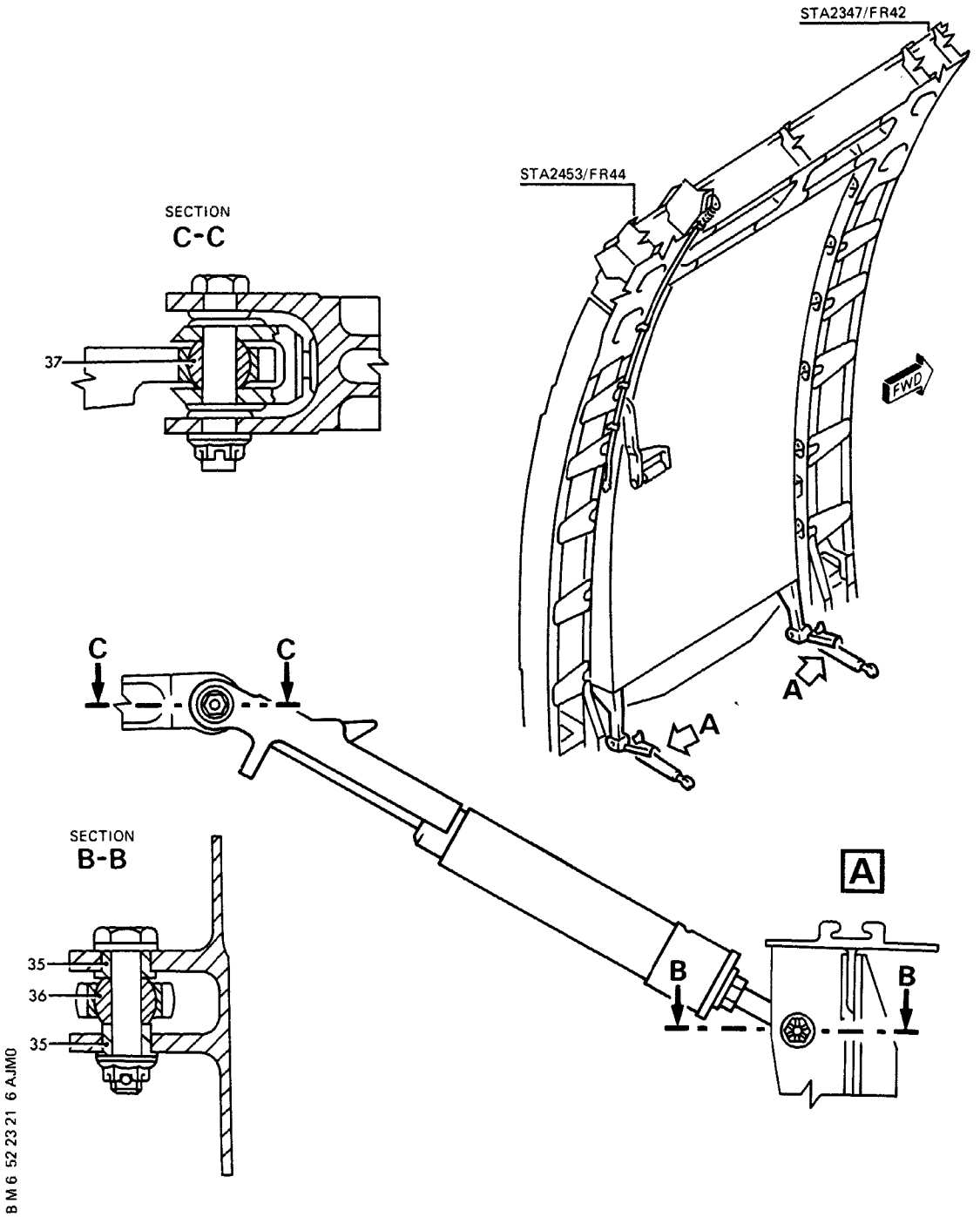


Hinge Rods
Figure 604

Fits and Clearances (Ref. Fig. 605)

Detail and Item No.	Original Mfg. Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B ID35	7.940 (0.3126)	7.955 (0.3132)				7.976 (0.3140)	
B-B ID36	7.925 (0.3120)	7.938 (0.3125)				7.958 (0.3133)	
C-C ID37	7.924 (0.3119)	7.937 (0.3125)				7.957 (0.3133)	

Table 605



Damper Cylinder
Figure 605

(3)Install locking mechanism (Ref. 52-23-21, P. Block 401).

D. Test
(1)Carry out functional test of emergency exit and adjust if necessary (Ref. 52-23-11, P. Block 501).
(2)Open emergency exit (Ref. 52-23-00, P. Block 301).

E. Close-Up
(1)Remove ballast weight.
(2)Make certain that all protruding thread ends are covered with corrosion-preventive paste (Mat. No. 05-002).
(3)Apply grease (Mat. No. 04-017) to exterior control handle mechanism.
(4)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and apply if necessary (Ref. 51-75-10, P. Block 801).

** ON DOOR SERIAL NO. 1002-1096

(5)Apply sealing grease (Mat. No. 05-001) to hinge rods.
(6)Not applicable

** ON DOOR SERIAL NO. 1097 AND SUBSEQUENT

(5) Apply sealing grease (Mat. No. 05-001) to hinge rods.
(6)Reposition rubber covers and secure with cable ties (Ref. 52-23-21, P. Block 401).

** ON ALL DOORS

(7)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(8)Install emergency exit insulation, if removed.
(9)Install access panels.
(10)Install emergency control handle.
(11)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(12)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(13)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(14)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(15)Remove rubber mats and supports.
(16)Remove access platform.

EMERGENCY ESCAPE SLIDE RELEASE MECHANISM REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exit escape slide release mechanisms are identical in design and function but are opposite hand. The LH escape slide release mechanism only is described and illustrated.

1. Reason for the Job

A. Removal and installation of the following:

NOTE : Item No. correspond with operations in Para. 3. C and 3. E.

(1)Emergency control handle
(2)Pushrod
(3)Upper assembly
(4)Lower assembly
(5)Connection assembly

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D.	Torque Wrench, up to 2.0 m.daN (177.0 lbf.in.)
E.	Corrosion-Resistant Steel Lockwire, 1.0 m (0.04 in.) dia.
F.	Cotter Pins
G.	Rubber Mats
H.	Supports
J. Material No. 04-004	Common Greases (Ref. 20-31-00)
K. Material No. 05-002	Special Materials (Ref. 20-31-00)
L. Material No. 05-027	Special Materials (Ref. 20-31-00)
M. Material No. 09-013	Sealants (Ref. 20-31-00)
N. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
P. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

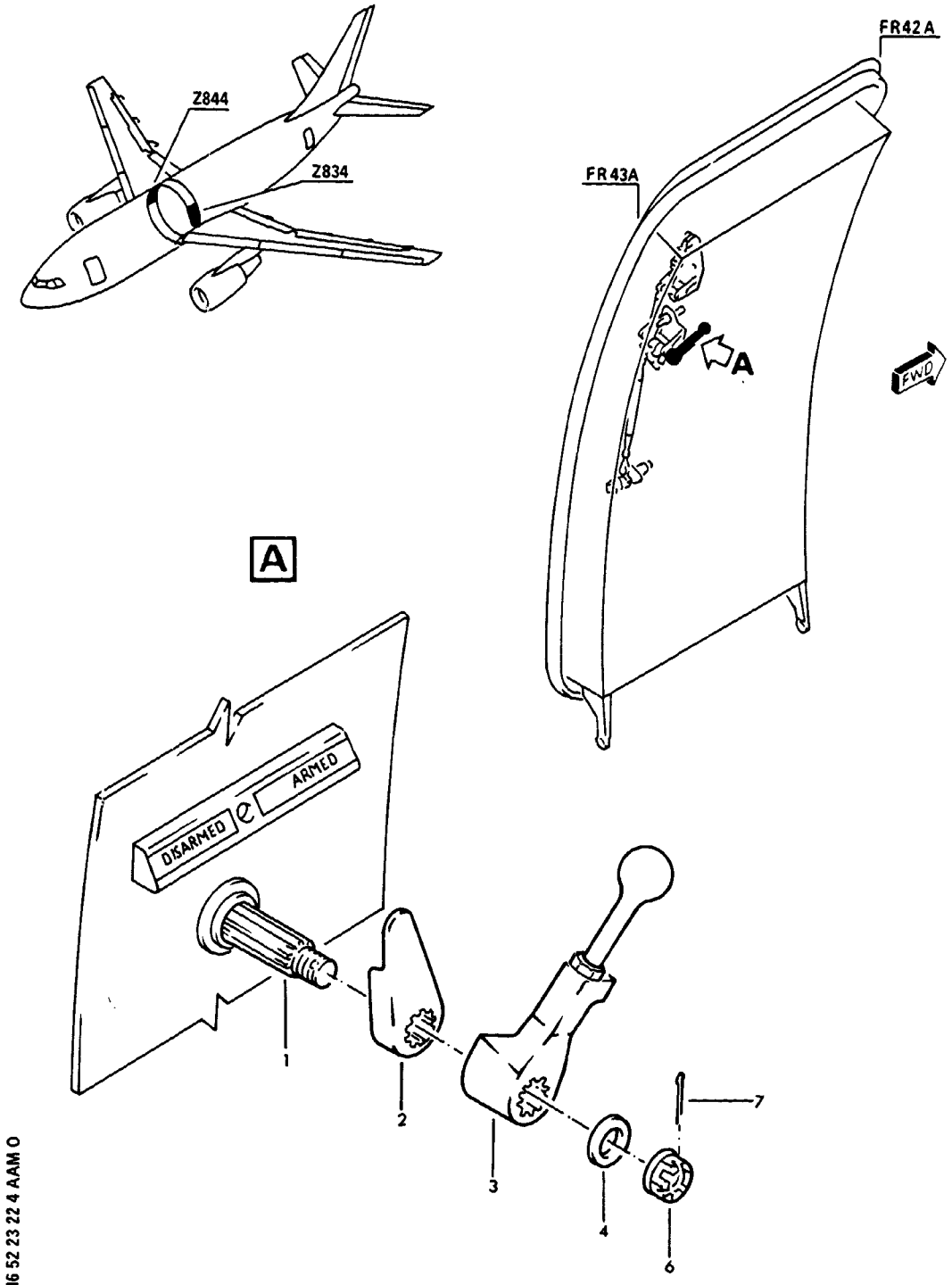
Referenced Procedures

- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-21, P. Block 401	Locking Mechanism
- 52-23-21, P. Block 501	Locking Mechanism
- 52-23-22, P. Block 501	Emergency Escape Slide Release Mechanism
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

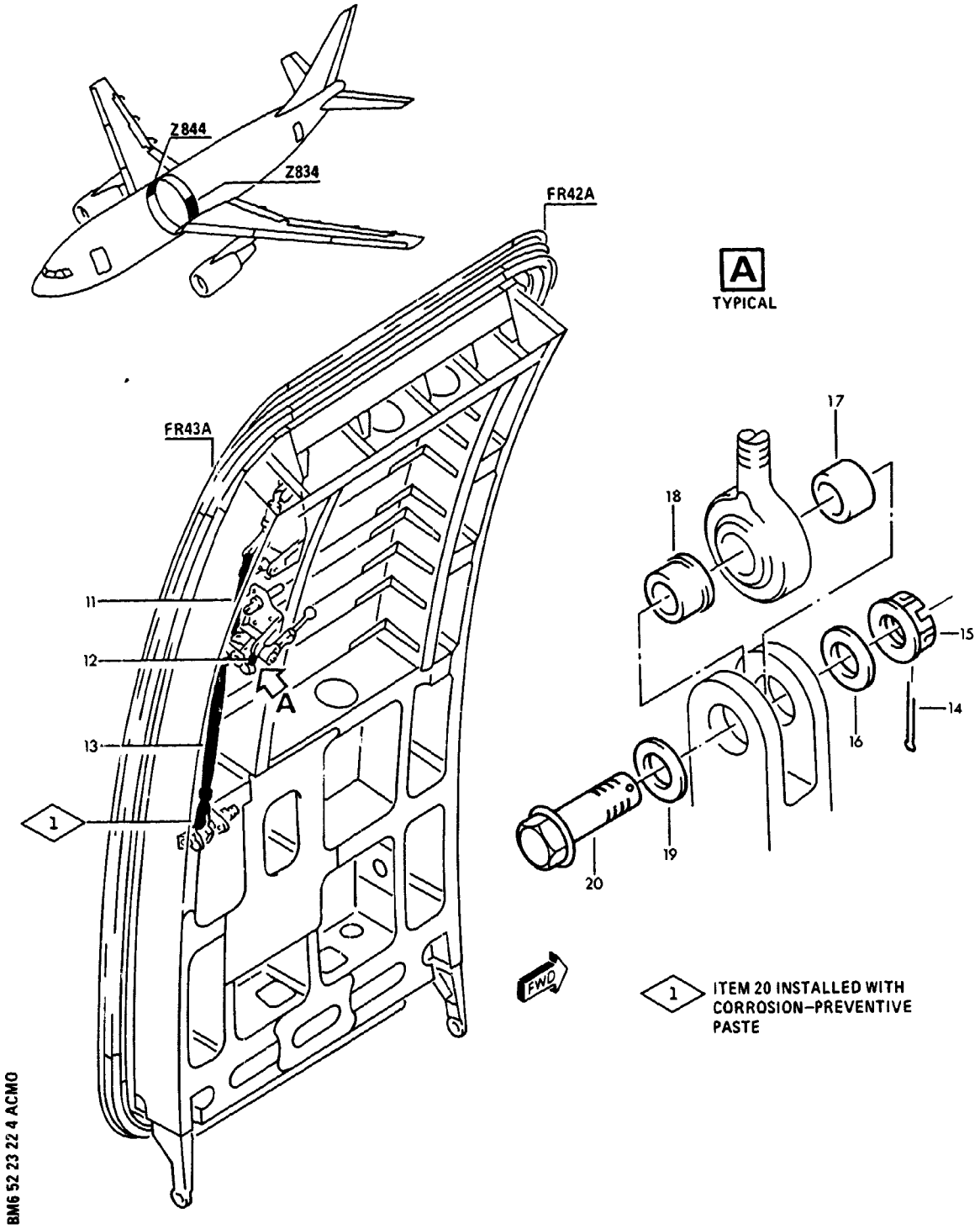
3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. Ref. 25-61-23, P. Block 401).
(7)Install ballast weight P/N 98A52207607000 (P/N 98A52207614000).
(8)Remove emergency control handle (Ref. Para. B. (1)).
(9)Remove access panel.
(10)Remove emergency exit insulation, if necessary.

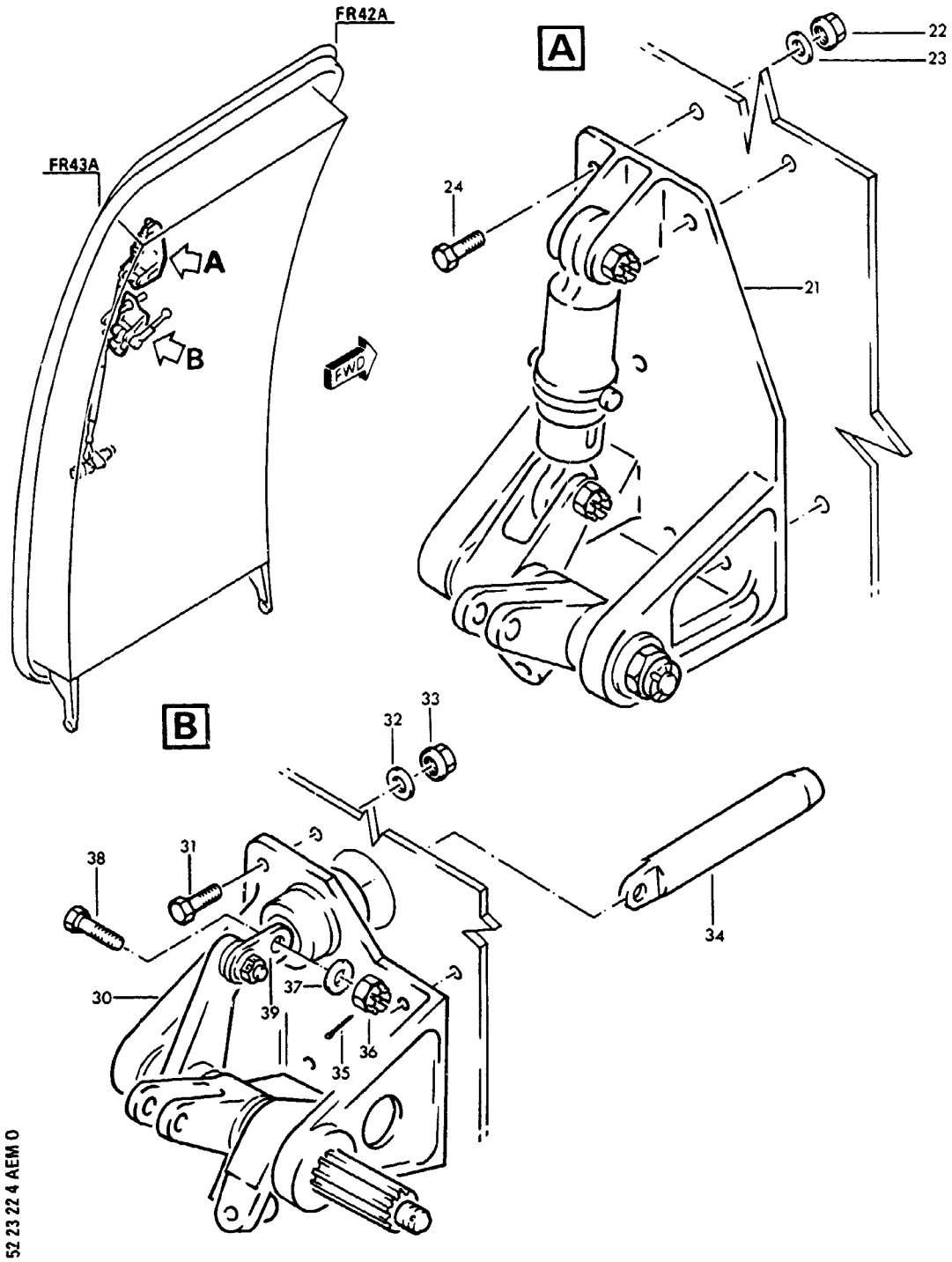
B. Removal
(1)Emergency Control Handle (Ref. Fig. 401)
NOTE : Record position of emergency control handle (3) and stop lever (2) on splined shaft (1) for subsequent installation.
(a)Remove cotter pin (7), nut (6), washer (4), emergency control handle (3) and stop lever (2).
(2)Pushrod - Typical (Ref. Fig. 402)
(a)Remove cotter pin (14), nut (15) and washer (16).
(b)Remove bolt (20) and washer (19).
(c)Remove pushrods (11, 12, 13).
(d)Remove bushes (17, 18).
(3)Upper Assembly (Ref. Fig. 403)
(a)Disconnect pushrod (11) (Ref. Para. B. (2)).
(b)Disconnect microswitch 29WN (30WN).
(c)Remove nuts (22), washers (23) and bolts (24).
(d)Remove upper assembly (21).
(4)Lower Assembly (Ref. Fig. 403)
(a)Disconnect pushrods (11, 12) (Ref. Para. B. (2)).
(b)Remove cotter pin (35), nut (36) and washer (37).
(c)Remove bolt (38) and pin (34) from link (39).
(d)Remove nuts (33), washers (32) and bolts (31).
(e)Remove lower assembly (30).



Emergency Control Handle
Figure 401



Pushrods - Typical
Figure 402



Upper and Lower Assemblies
Figure 403

(5)Connection Assembly (Ref. Fig. 404)

NOTE : Record position of levers (42, 52) on splined shaft (48) for subsequent installation.

(a)Disconnect pushrod (13) (Ref. Para. B. (2)).

(b)Remove exterior control handle and splined shaft (Ref. 52-23-21, P. Block 401).

(c)Remove nut (40), washer (41) and bolt (43).

(d)Cut and remove lockwire securing bolt (55).

(e)Remove bolt (55) and washer (54).

(f)Remove levers (42, 52), spacers (44, 51) and washers (45, 50).

(g)Remove splined shaft (48) from bearing assembly (47).

(h)Remove roller (61) from lever (42).

1 Remove cotter pin (66), nut (65) and washers (64).

2 Remove bolt (60), spacer (63), bush (62) and roller (61).

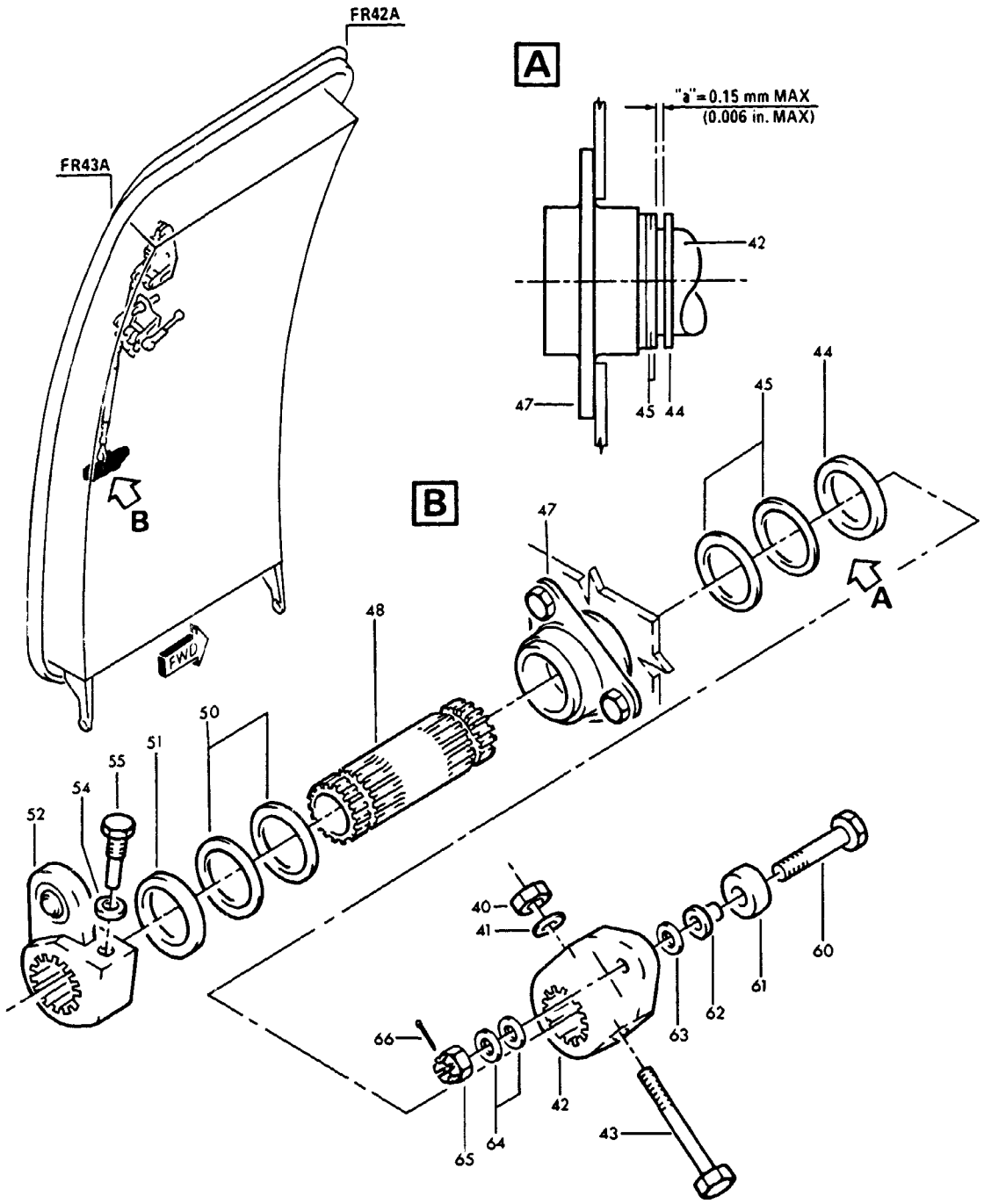
C. Preparation for Installation

(1)Remove damaged sealant and clean all components, except components coated with Polytetrafluoroethylene (PTFE), with cleaning agent (Mat. No. 11-004).

(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).

(3)Unless otherwise stated, all static parts must be sealed with sealant (Mat. No. 09-013) after installation (Ref. 51-76-10, P. Block 801).

(4)Lubricate all moving parts, except PTFE coated components, with grease (Mat. No. 04-004).



BM6 52 23 22 4 AGM O

Connection Assembly
Figure 404

D. Installation
(1)Emergency Control Handle (Ref. Fig. 401)
NOTE : Stop lever (2) and emergency control handle (3) must be positioned on splined shaft (1) as recorded on removal.
(a)Apply corrosion-preventive paste (Mat. No. 05-002) to splines of stop lever (2) and emergency control handle (3).
(b)Install stop lever (2), emergency control handle (3), washer (4) and nut (6).
(c)TORQUE nut (6) to between 1.1 and 1.3 m.daN (97.4 and 115.0 lbf.in.).
(d)Safety nut (6) with cotter pin (7).
(2)Pushrod - Typical (Ref. Fig. 402)
(a)Install bushes (17, 18) and position pushrods (11, 12, 13).
(b)Position washer (19) and install bolt (20).
NOTE : Bolt (20), at lower end of pushrod (13), is installed with corrosion-preventive paste (Mat. No. 05-002).
(c)Install washer (16) and nut (15).
(d)Safety nut (15) with cotter pin (14).
(3)Upper Assembly (Ref. Fig. 403)
(a)Apply corrosion-preventive paste (Mat. No. 05-002) to plain shank of bolts (24).
(b)Position upper assembly (21) and install bolts (24).
(c)Install washers (23) and nuts (22).
(d)Connect microswitch 29WN (30WN).
(e)Connect pushrod (11) (Ref. Para. D. (1)).
(4)Lower Assembly (Ref. Fig. 403)
(a)Apply corrosion-preventive paste (Mat. No. 05-002) to plain shank of bolts (31).
(b)Position lower assembly (30) and install bolts (31).
(c)Install washers (32) and nuts (33).
(d)Position pin (34) and link (39).
(e)Install bolt (38), washer (37) and nut (36).
(f)Safety nut (36) with cotter pin (35).
(g)Connect pushrods (11, 12) (Ref. Para. D. (1)).
(5)Connection Assembly (Ref. Fig. 404)
NOTE : Levers (42, 52) must be positioned on splined shaft (48) as recorded on removal.
(a)Install roller (61) on lever (42).
1 Apply grease (Mat. No. 04-004) to roller (61) and associated hardware.
2 Position spacer (63), bush (62) and roller (61).
3 Install bolt (60), washers (64) and nut (65).
4 TORQUE nut (65) to 1.2 m.daN (106 lbf.in.).
5 Safety nut (65) with cotter pin (66).
(b)Apply grease (Mat. No. 04-004) to contact area between bearing assembly (47) and splined shaft (48).
(c)Position splined shaft (48).
(d)Install washers (45, 50) and spacers (44, 51).
(e)Apply corrosion-preventive paste (Mat. No. 05-002) to splines of levers (42, 52) and plain shank of bolts (43, 55).
(f)Apply grease (Mat. No. 04-004) to bearing of lever (52).
(g)Install levers (42, 52).

(h)Install bolt (43), washer (41) and nut (40).
(j)Position washer (54) and install bolt (55).
(k)Make certain that gap 'a', between washer (45) and spacer (44), is not more than 0.15 mm (0.006 in.). Should stated limit be exceeded, remove or install washers (45, 50) as required.
(l)Secure bolt (55) with lockwire.
(m)Install exterior control handle and splined shaft (Ref. 52-23-21, P. Block 401).
(n)Connect pushrod (13) (Ref. Para. D. (1)).

E. Test

CAUTION : IF ANY COMPONENTS HAVE BEEN REMOVED OR REPLACED, AN ADJUSTMENT/TEST OF THE EMERGENCY EXIT MUST BE CARRIED OUT (REF. 52-23-11, P. BLOCK 501).

(1)Remove safety clips and tags and close circuit breakers 1WN, 2WN and 1WS.
(2)Close emergency exit (Ref. 52-23-00, P. Block 301).
(3)Move emergency control handle (3) to ARMED and back to DISARMED position several times and check emergency escape slide release mechanism for smooth operation (Ref. Fig. 401).
(4)Check adjustment of emergency escape slide release mechansim (Ref. 52-23-12, P. Block 501).
(5)Check adjustment of emergency exit locking mechanism (Ref. 52-23-21, P. Block 501).
(6)Carry out adjustment/test of emergency exit warning switches (Ref. 52-71-11, P. Block 501).
(7)Carry out adjustment/test of emergency escape slide release warning (Ref. 52-73-13, P. Block 501).
(8)Open emergency exit (Ref. 52-23-00, P. Block 301).

F. Close-Up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove ballast weight.
(3)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(4)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew as necessary (Ref. 51-75-10, P. Block 801).
(5)Install emergency exit insulation, if removed.
(6)Install access panel and emergency control handle (3) (Ref. Para. D. (1)).
(7)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(8)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(9)Close emergency exit (Ref. 52-23-00, P. Block 301).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(10)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(11)Remove supports and rubber mats.
(12)Remove access platform.

EMERGENCY ESCAPE SLIDE RELEASE MECHANISM ADJUSTMENT/TEST

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exit escape slide release mechanisms are identical in design and function but are opposite hand. The LH escape slide release mechanism only is described and illustrated.

1. Reasons for the Job

A. Adjustment and test of the following:
NOTE : Item letters correspond with operations in procedure.

B. Adjustment of pushrods

C. Lower assembly

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D.	Cotter Pins
E.	Corrosion - Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
F.	Rubber Mats
G.	Supports
H. Material No. 05-002	Special Materials (Ref. 20-31-00)
J. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

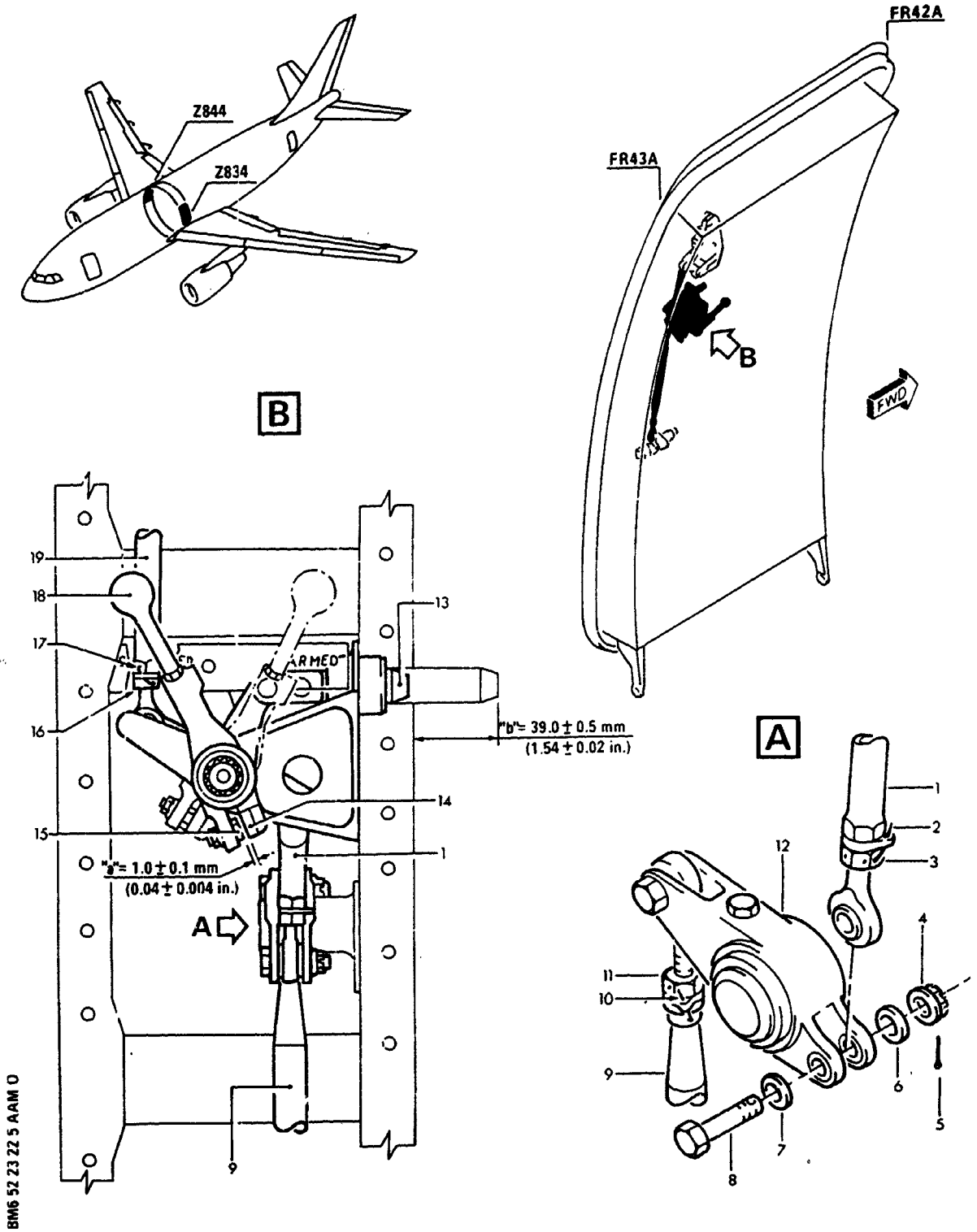
- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-21, P. Block 501	Locking Mechanism
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-13, P. Block 501	Limit Switch

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Remove emergency control handle (18) (Ref. 52-23-22, P. Block 401).
(8)Remove access panels, as required.
(9)Remove emergency exit insulation, if necessary.
(10)Install ballast weight P/N 98A52207607000 (P/N 98A52207614000).
(11)Close emergency exit (Ref. 52-23-00, P. Block 301).
(12)Make certain that emergency exit locking mechanism is correctly adjusted (Ref. 52-23-21, P. Block 501).

B. Adjustment of Pushrods (Ref. Fig. 501)
(1)Cut and remove lockwire (10, 17) from locknuts (11, 16) at both ends of pushrods (9, 19).
(2)Release locknuts (11, 16).
(3)Adjust pushrods (9, 19) as required.
(4)Tighten locknuts (11, 16) and safety with lockwire (10, 17).

C. Adjustment of Lower Assembly (Ref. Fig. 501)
(1)Make certain that exterior control handle is closed.
(2)Position emergency control handle (18) and move to ARMED position.
(3)Check that extension 'b' of pin (13) is 39.0 ± 0.5 mm (1.54 ± 0.02 in.) from frame segment. Should stated limits be exceeded, proceed as follows:
(a)Cut and remove lockwire (10) from locknuts (11) at both ends of pushrod (9).
(b)Release locknuts (11).
(c)Adjust pushrod (9) as required.
(d)Tighten locknuts (11).
(e)Move exterior control handle to open position.
(f)Check that gap 'a', between stop (14) and head of stop bolt (15), is 1.0 ± 0.1 mm (0.04 ± 0.004 in.). Should stated limits be exceeded, proceed as follows:
1 Cut and remove lockwire (17) from locknuts (16) at both ends of pushrod (19).
2 Release locknuts (16).
3 Adjust pushrod (19) as required.
4 Tighten locknuts (16).



Pushrods and Lower Assembly
Figure 501

(g)If extension 'a' or gap 'b' cannot be obtained, proceed as follows:
1 Cut and remove lockwire (2) from locknut (3) of pushrod (1).
2 Release locknut (3).
3 Remove cotter pin (5), nut (4) and washer (6).
4 Remove bolt (8) and washer (7). Make certain that bushes in bell-crank lever (12) are retained in position.
5 Adjust eye-end of pushrod (1) as required.
6 Apply corrosion-preventive paste (Mat. No. 05-002) to plain shank of bolt (8).
7 Position eye-end of pushrod (1) and washer (7).
8 Install bolt (8), washer (6) and nut (4).
9 Safety nut (4) with cotter pin (5).
10 Tighten locknut (3).
(h)Check that pin (13) is retracted past level of frame flanges.
(j)Safety locknuts (3, 11, 16) with lockwire (2, 10, 17).

D. Test
(1)Carry out the following adjustment/test procedures:
(a)Exit warning (Ref. 52-71-11, P. Block 501).
(b)Emergency escape slide release warning (Ref. 52-73-13, P. Block 501).

E. Close-Up
(1)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(2)Remove emergency control handle (18).
(3)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(4)Remove ballast weight.
(5)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(6)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew if necessary (Ref. 51-75-10, P. Block 801).
(7)Install emergency exit insulation, if removed.
(8)Install access panels.
(9)Install emergency control handle (18), (Ref. 52-23-22, P. Block 401).
(10)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(11)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(12)Close emergency exit and remove support (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(13)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(14)Remove rubber mats.
(15)Remove access platform.

EMERGENCY ESCAPE SLIDE RELEASE MECHANISM INSPECTION/CHECK

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency escape slide release mechanisms are identical in design and function but are opposite hand. The LH escape slide release mechanism only is described.

NOTE : Should a defect be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a defect is subsequently proved to exist, a structural repair must be carried out, or component must be replaced.

1. Reasons for the Job

A. Inspection to determine emergency escape slide release mechanism is free from damage

B. Check of emergency escape slide operation

C. Measurement of fits and clearances

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207607000	Ballast Weight - Emergency Exit, LH
C. 98A52207614000	Ballast Weight - Emergency Exit, RH
D.	Rubber Mats
E.	Supports
F. Material No. 05-002	Special Materials (Ref. 20-31-00)
G. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide (Ref. 25-61-23, P. Block 401).
(7)Remove emergency control handle (Ref. 52-23-22, P. Block 401).
(8)Remove access panels.
(9)Remove emergency exit insulation, if necessary.
(10)Install emergency control handle.
(11)Install emergency exit ballast weight P/N 98A52207607000 (98A52207614000).

B. Inspection/Check of Emergency Escape Slide Release Mechanism
(1)Inspect release mechanism for damage.
(2)Check that release mechanism and hardware are secure and safetied.
(3)Inspect complete release mechanism for:
(a)Corrosion. For the removal of corrosion refer to 51-74-10, P. Block 801.
(b)Scratches, marks and dents. For the removal of scratches, marks and dents refer to 51-73-10, P. Block 801.
(c)Satisfactory paint coating. For the repair of paint coatings refer to 51-75-10, P. Block 801.
(d)Deformation. Deformed parts must be replaced.
(4)Check sealant for condition and serviceability. Renew sealant if necessary (Ref. 51-76-10, P. Block 801).

C. Measurement of Fits and Clearances

(1)Remove release mechanism as required (Ref. 52-23-22, P. Block 401).

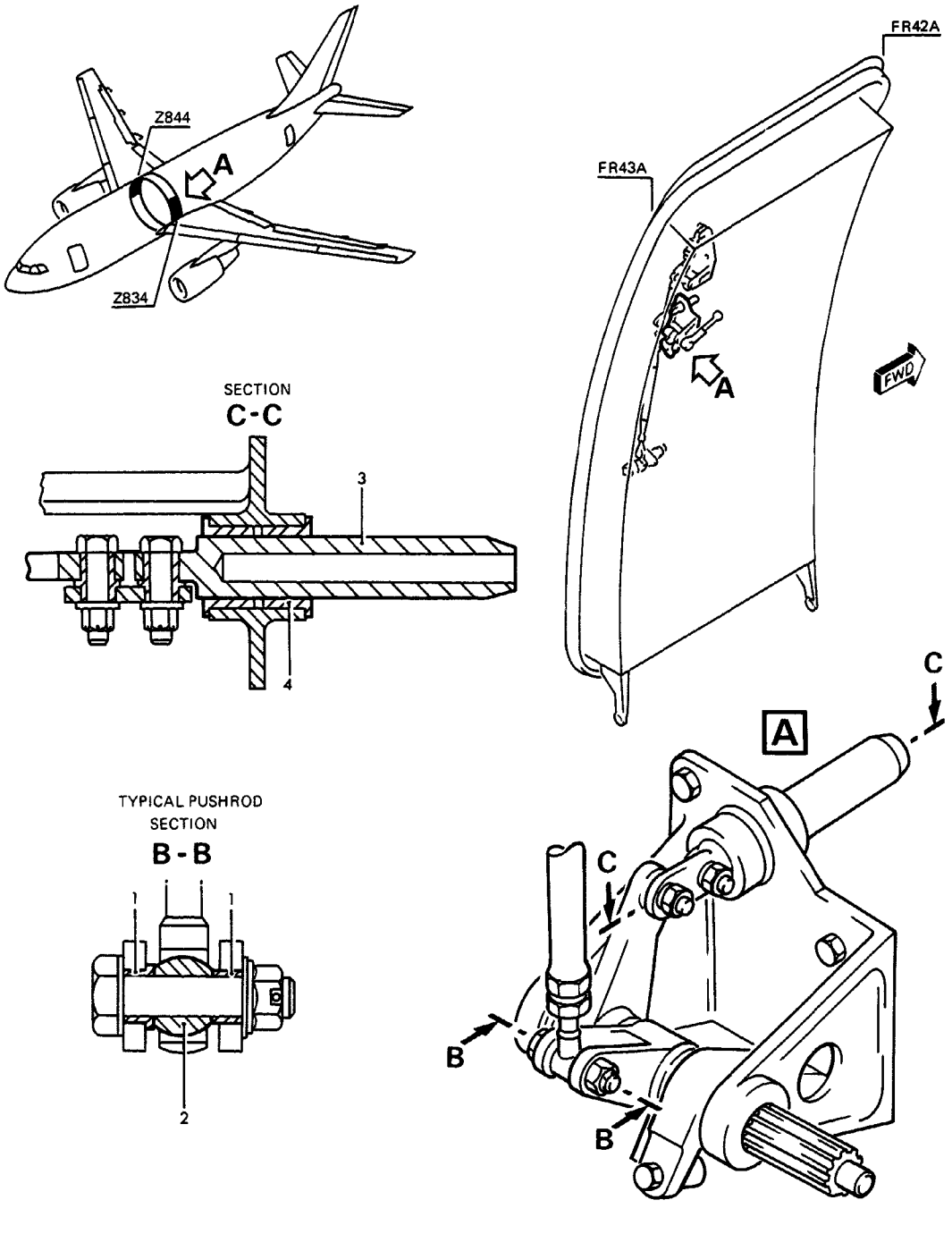
(2)Carry out check of fits and clearances (Ref. Table 601 and 602).

NOTE : Figure 1) in any column denotes a PTFE coated component.

Fits and Clearances (Ref. Fig. 601)

Detail and Item No.	Original Mfg. Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B ID1	6.350 (0.2500)	6.365 (0.2506)				6.386 (0.2514)	
B-B ID2	6.337 (0.2495)	6.388 (0.2515)				6.427 (0.2530)	
C-C OD3	15.830 (0.6232)	15.880 (0.6252)	0.013 (0.0005)	0.088 (0.0035)	15.770 (0.6209)		
C-C ID4	15.893 (0.6257)	15.918 (0.6267)				1)	

Table 601

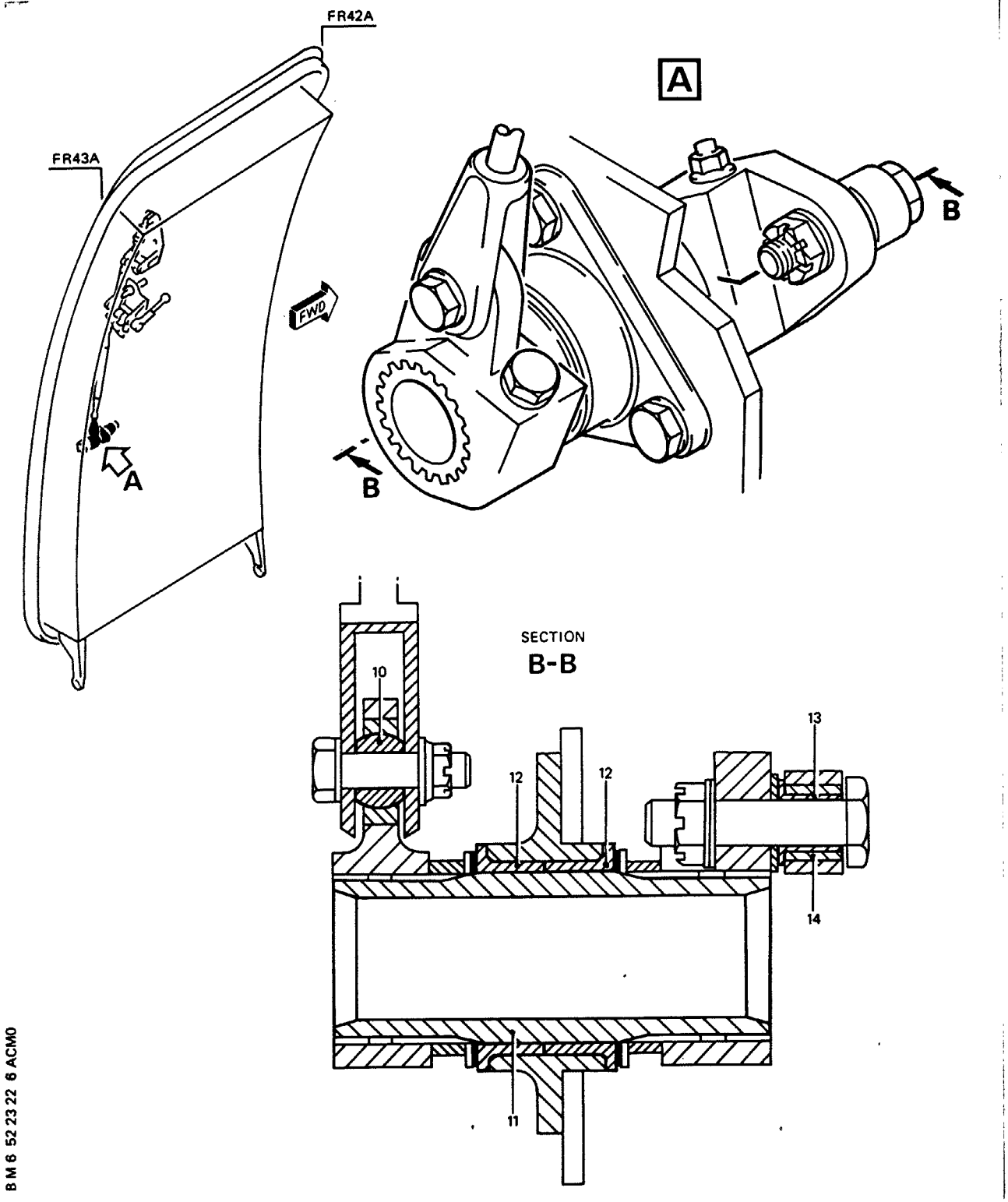


Pushrod and Pin
Figure 601

Fits and Clearances (Ref. Fig. 602)

Detail and Item No.	Original Mfg. Limits				In-Service wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B ID10	6.337 (0.2495)	6.350 (0.2500)					
B-B OD11	29.959 (1.1795)	29.980 (1.1803)			29.947 (1.1790)		
			0.020 (0.0008)	0.054 (0.0021)			0.105 (0.0041)
B-B ID12	30.000 (1.1811)	30.021 (1.1819)				30.052 (1.1831)	
B-B OD13	9.511 (0.3744)	9.520 (0.3748)			9.498 (0.3739)		
			0.020 (0.0008)	0.052 (0.0020)			
B-B ID14	9.540 (0.3756)	9.563 (0.3765)				1)	

Table 602



Connection Assembly
Figure 602

(3)Install release mechanism (Ref. 52-23-22, P. Block 401).

D. Test
(1)Close emergency exit (Ref. 52-23-00, P. Block 301).
(2)Carry out functional test of emergency exit and adjust if necessary (Ref. 52-23-11, P. Block 501).
(3)Open emergency exit (Ref. 52-23-00, P. Block 301).

E. Close-Up
(1)Remove emergency control handle.
(2)Remove ballast weight.
(3)Make certain that all protruding thread ends are covered with corrosion-preventive paste (Mat. No. 05-002).
(4)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and apply if necessary (Ref. 51-75-10, P. Block 801).
(5)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(6)Install emergency exit insulation, if removed.
(7)Install access panels.
(8)Install emergency control handle.
(9)Install overwing escape slide (Ref. 25-61-23, P. Block 401).
(10)Install escape slide cover (Ref. 52-23-13, P. Block 401).
(11)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(12)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(13)Remove rubber mats and supports.
(14)Remove access platform.

FITTINGS - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

CAUTION : AFTER REMOVAL/INSTALLATION OF FITTINGS AN ADJUSTMENT/TEST OF EMERGENCY EXIT MUST BE CARRIED OUT.

NOTE : The LH and RH emergency exit fittings are identical in design and function but are opposite hand. The LH emergency exit fittings only are described and illustrated.

1. Reason for the Job

A. Removal and installation of the following:

NOTE : Item No. correspond with operations in Para 3.B and 3.D.

(1)Stop fittings
(2)Upper and lower guide and roller fittings
(3)Centering and roller fittings
(4)Lowering stop fitting
(5)Hinge rod attach fittings
(6)Support cable assembly

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B.	Torque Wrench, up to 1.0 m.daN (88 lbf. in.)
C.	Nylon Cord
D.	Rubber Mats
E.	Supports
F. Material No. 04-004	Common Greases (Ref. 20-31-00)
G. Material No. 05-002	Special Materials (Ref. 20-31-00)
H. Material No. 05-027	Special Materials (Ref. 20-31-00)
J. Material No. 09-013	Sealants (Ref. 20-31-00)
K. Material No. 09-019	Sealants (Ref. 20-31-00)
L. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
M. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

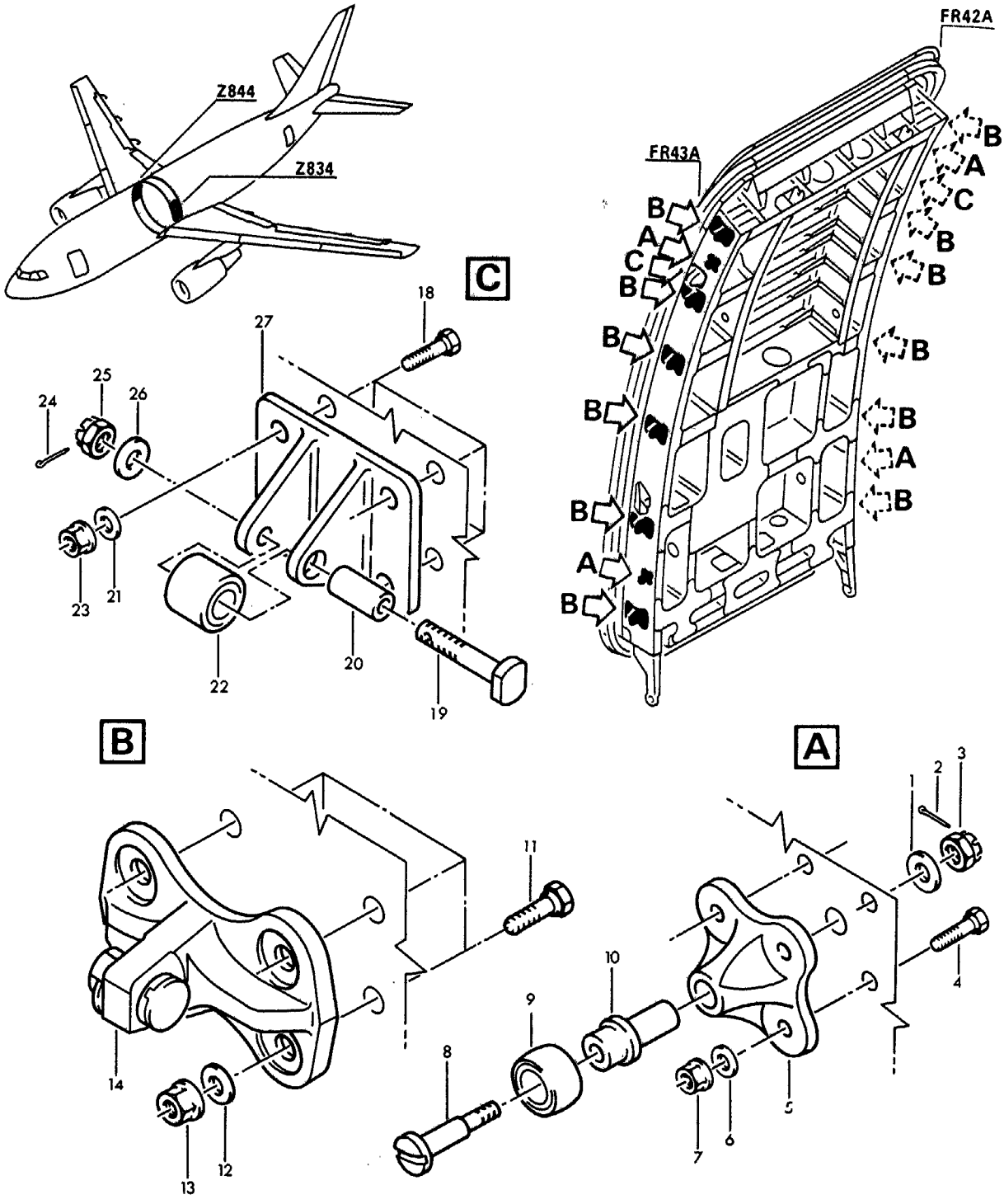
- 25-23-41, P. Block 401	Door Frame Linings
- 25-61-23, P. Block 401	Overwing Escape Slide
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-13, P. Block 401	Lining and Insulation
- 52-23-21, P. Block 401	Locking Mechanism
- 52-23-22, P. Block 401	Emergency Escape Slide Release Mechanism
- 53-10-25, P. Block 401	Passenger Compartment Floor Panels

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(5)Remove escape slide cover, if necessary (Ref. 52-23-13, P. Block 401).
(6)Remove overwing escape slide if necessary (Ref. 25-61-23, P. Block 401).
(7)Remove emergency control handle, if necessary (Ref. 52-23-22, P. Block 401).
(8)Remove access panels, as required.
(9)Remove emergency exit insulation, if necessary.
(10)Remove emergency exit fuselage frame linings as required (Ref. 25-23-41, P. Block 401).
(11)Remove floor panels if necessary (Ref. 53-10-25, P. Block 401).

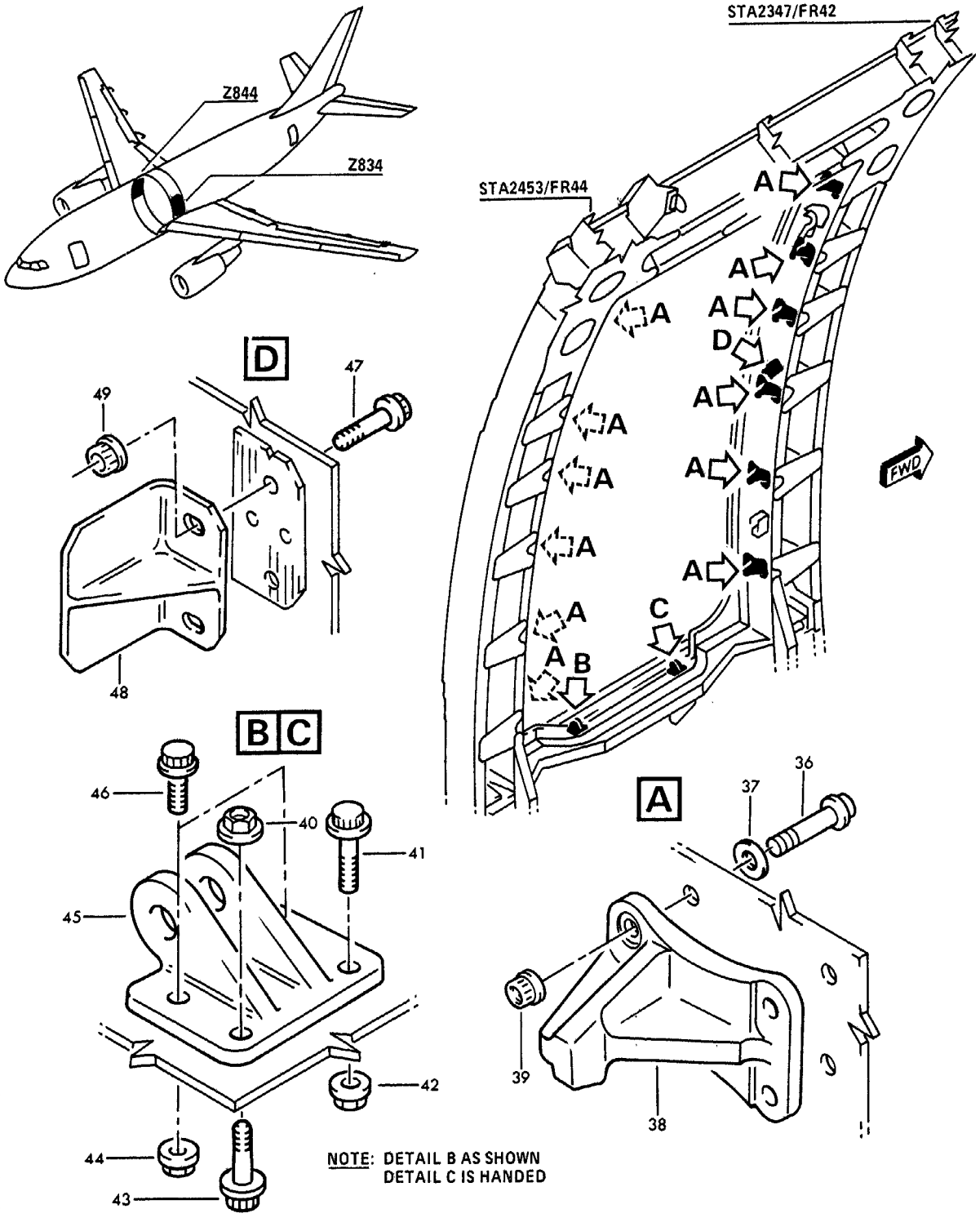
B. Removal of Fittings
(1)Removal of Stop Fittings.
(a)Remove stop fitting (38) from emergency exit fuselage frame (Ref. Fig. 402).
1 Remove nuts (39), bolts (36) and washers (37).
2 Remove stop fitting (38).
(b)Remove adjustable stop fitting (14) from emergency exit frame (Ref. Fig. 401).
1 Remove nuts (13), washers (12) and bolts (11).
2 Remove adjustable stop fitting (14).
(2)Removal of Upper and Lower Guide and Roller Fittings.
(a)Remove upper guide fitting (59) from emergency exit fuselage frame (Ref. Fig. 403).
1 Remove nuts (58) and bolts (56).
2 Remove upper guide fitting (59) and serrated plate (57).
(b)Remove lower guide fitting (67) from emergency exit fuselage frame (Ref. Fig. 403).
1 Remove nuts (66) and bolts (64).
2 Remove lower guide fitting (67) and serrated plate (65).
(c)Remove upper and lower roller fittings (5) from emergency exit frame (Ref. Fig. 401).
1 Remove nuts (7), washers (6) and bolts (4).
2 Remove roller fitting (5) from emergency exit frame.
3 Remove cotter pin (2), nut (3) and washer (1).
4 Remove bolt (8), roller (9) and bush (10).

(3)Removal of Centering and Roller Fittings.
(a)Remove centering fitting (70) from emergency exit fuselage frame (Ref. Fig. 403).
1 Remove nuts (68) and bolts (71).
2 Remove centering fitting (70) and shim (69).
(b)Remove centering roller fitting (27) from emergency exit frame (Ref. Fig. 401).
1 Remove nuts (23), washers (21) and bolts (18).
2 Remove centering roller fitting (27).
3 Remove cotter pin (24), nut (25) and washer (26).
4 Remove bolt (19), bush (20) and roller (22).
(4)Removal of Lowering Stop Fitting.
(a)Remove lowering stop fitting (48) from emergency exit fuselage frame (Ref. Fig. 402).
1 Remove nuts (49) and bolts (47).
2 Remove lowering stop fitting (48).
(5)Removal of Hinge Rod Attach Fittings.
(a)Remove hinge rod attach fitting (45) from threshold of emergency exit (Ref. Fig. 402).
1 Release spring tension of lift compensation mechanism (Ref. 52-23-21, P. Block 401).
2 Disconnect hinge rods at hinge rod attach fitting (45) (Ref. 52-23-21, P. Block 401).
3 Remove nuts (40, 42, 44) and bolts (41, 43, 46). Record location of bolts (41, 46) for subsequent installation.
4 Remove hinge rod attach fitting (45).
(6)Removal of Support Cable Assembly (Ref. Fig. 404).
(a)Disconnect support cable (79) from emergency exit.
1 Close emergency exit (Ref. 52-23-00, P. Block 301).
2 Remove cotter pin (78), washer (77) and pin (76).
3 Open and support emergency exit (Ref. 52-23-00, P. Block 301).
(b)Remove support cable (79) from support cable assembly (82).
1 Attach nylon cord to upper end of spring (87).
2 Disconnect spring (87) from bracket (88).
3 Remove support cable (79) and spring (87) from tube (86).
4 Disconnect support cable (79) from spring (87).
5 Cut and remove lockwire from nut (84).
6 Release nut (84) and remove adjustment screw (85) from support cable assembly (82).
7 Remove nut (84) from adjustment screw (85).
8 Remove adjustment screw (85) from support cable (79).
9 Remove nut (84) and lockwasher (83) from support cable (79).
10 Remove support cable (79) from support cable assembly (82).
(c)Remove support cable assembly (82) from emergency exit fuselage frame.
1 Remove nuts (81), washers (80) and bolts (75).
2 Remove support cable assembly (82) from emergency exit fuselage frame.

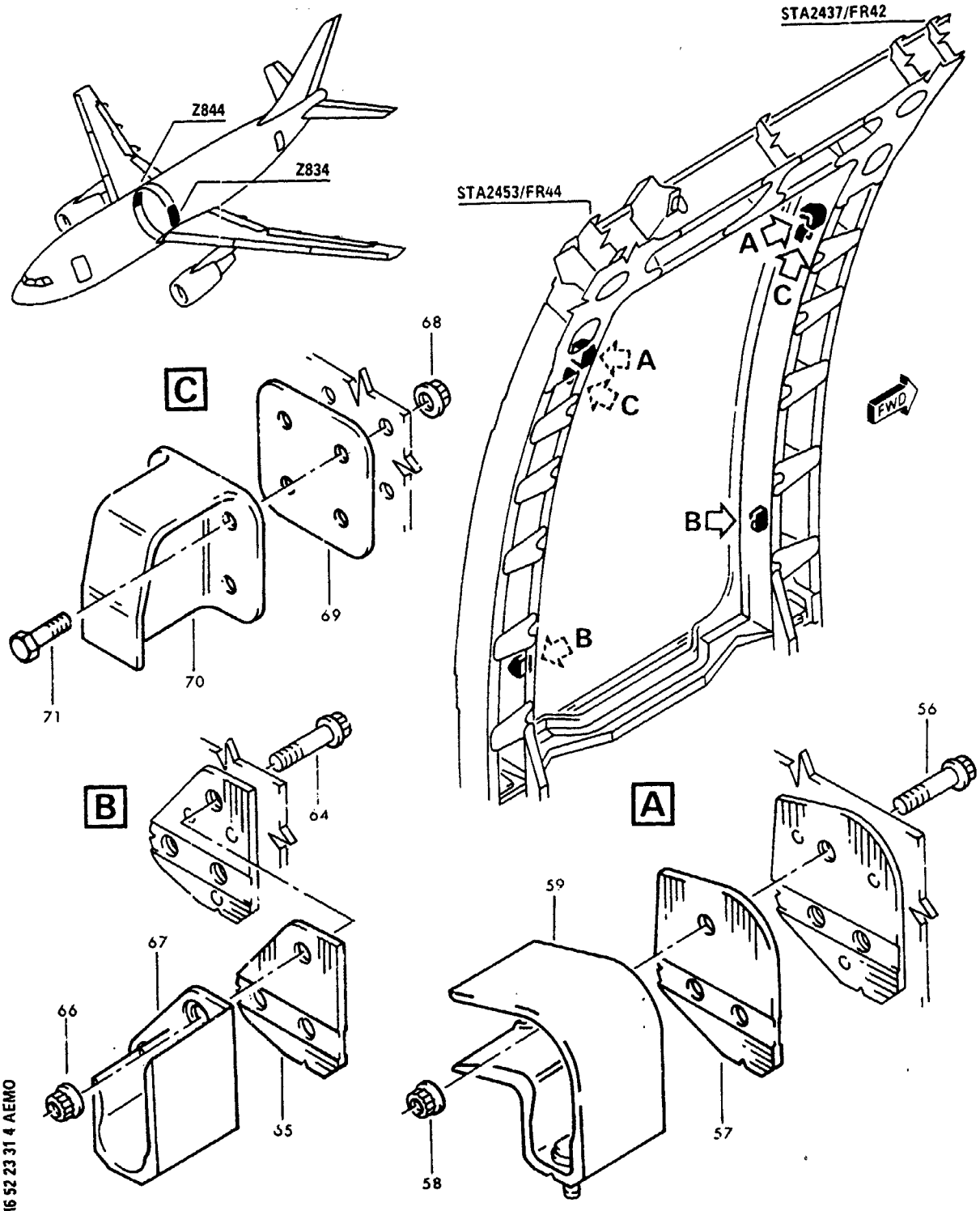


BM6 52 23 31 4 AAMO

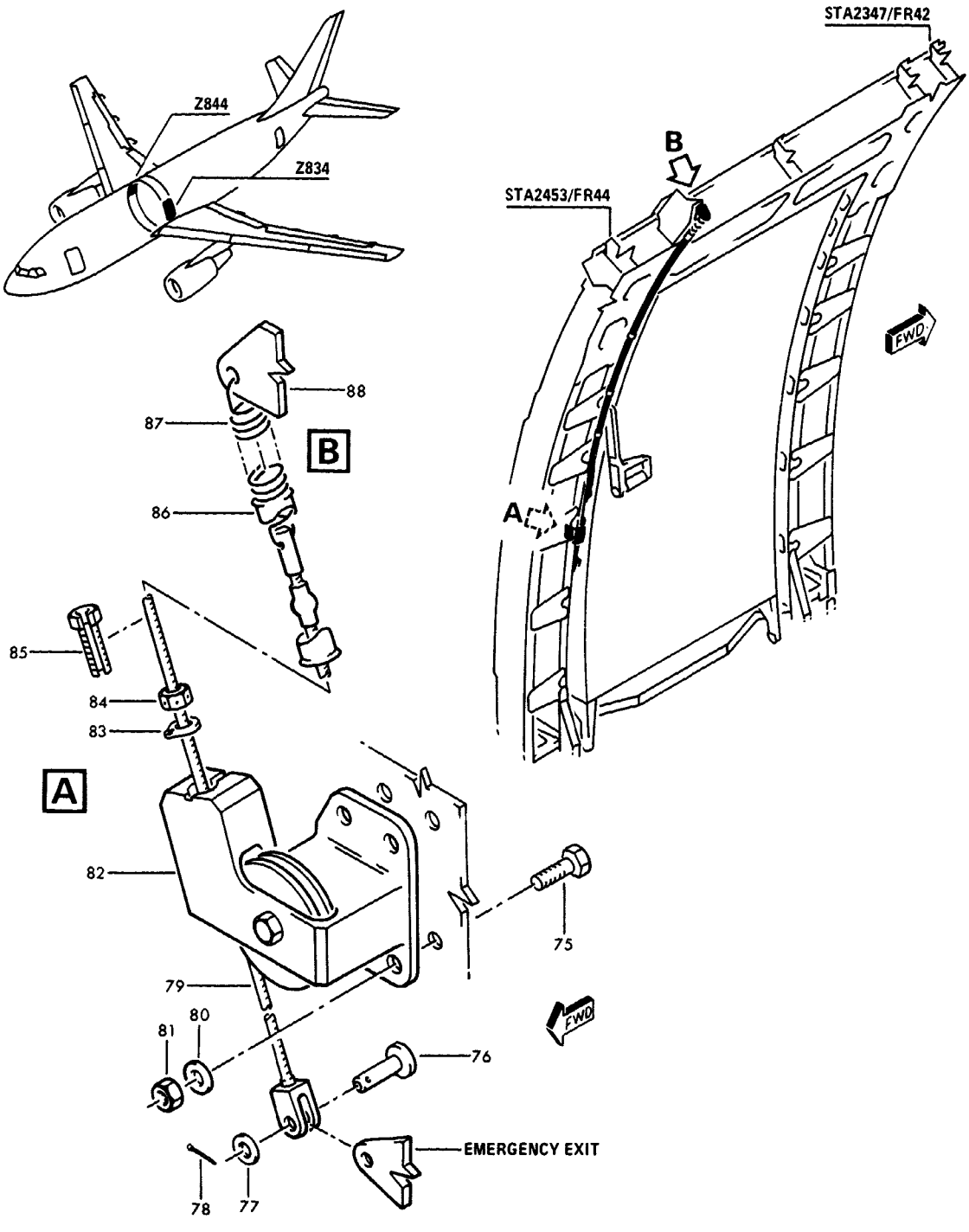
Emergency Exit Fittings
Figure 401



Emergency Exit Fittings
Figure 402



Emergency Exit Fittings
Figure 403



Support Cable Assembly
Figure 404

C. Preparation for Installation
(1)Remove damaged sealant and clean all components, except components coated with Polytetrafluoroethylene (PTFE) with cleaning agent (Mat. No. 11-004).
(2)Clean all PTFE coated components with alcohol (Mat. No. 11-008).
(3)Make certain that all sharp edges and corners have been removed. Repair paint coatings, as required (Ref. 51-75-10, P. Block 801).

D. Installation
(1)Installation of Stop Fittings.
(a)Install emergency exit fuselage frame stop fitting (38) (Ref. Fig. 402).
1 Apply sealant (Mat. No. 09-013) to stop fitting (38) where stop fitting (38) contacts emergency exit fuselage frame and to plain shank of bolts (36) (Ref. 51-76-10, P. Block 801).
2 Position stop fitting (38).
3 Install bolts (36), washers (37) and nuts (39).
(b)Install emergency exit frame adjustable stop fitting (14) (Ref. Fig. 401).
1 Apply sealant (Mat. No. 09-013) to stop fitting (14) where stop fitting (14) contacts emergency exit frame, and to plain shank of bolts (11) (Ref. 51-76-10, P. Block 801).
2 Position stop fitting (14).
3 Install bolts (11), washers (12) and nuts (13).
(2)Installation of Upper and Lower Guide and Roller Fittings.
(a)Install emergency exit fuselage frame upper guide fitting (59) (Ref. Fig. 403).
1 Apply grease (Mat. No. 04-004) to all contact surfaces between serrated plate (57), upper guide fitting (59), serrated plate attached to emergency exit fuselage frame, and to plain shank of bolts (56).
2 Position serrated plate (57) and upper guide fitting (59).
3 Install bolts (56) and nuts (58).
(b)Install emergency exit fuselage frame lower guide fitting (67) (Ref. Fig. 403).
1 Apply grease (Mat. No. 04-004) to all contact surfaces between serrated plate (65), lower guide fitting (67), serrated plate attached to emergency exit fuselage frame, and to plain shank of bolts (64).
2 Position serrated plate (65) and lower guide fitting (67).
3 Install bolts (64) and nuts (66).

(c)Install emergency exit frame upper and lower roller fittings (5) (Ref. Fig. 401).
1 Apply corrosion-preventive paste (Mat. No. 05-002) to plain shank of bolt (8) and bush (10).
2 Install bush (10), roller (9) and bolt (8).
3 Install washer (1) and nut (3).
4 TORQUE nut (3) to between 0.3 and 0.35 m.daN (26.55 and 30.9 lbf.in.).
5 Safety nut (3) with cotter pin (2).
6 Apply sealant (Mat. No. 09-013) to roller fitting (5) where roller fitting (5) contacts emergency exit frame, and to plain shank of bolts (4) (Ref. 51-76-10, P. Block 801).
7 Position roller fitting (5) and install bolts (4), washers (6) and nuts (7).

(3)Installation of Centering and Roller Fittings.
(a)Install emergency exit fuselage frame centering fitting (70) (Ref. Fig. 403).
1 Apply sealant (Mat. No. 09-013) to all contact surfaces between shim (69), centering fitting (70), emergency exit fuselage frame, and to plain shank of bolts (71) (Ref. 51-76-10, P. Block 801).
2 Position shim (69) and centering fitting (70).
3 Install bolts (71) and nuts (68).
(b)Install emergency exit frame centering roller fitting (27) (Ref. Fig. 401).
1 Position roller (22) and install bush (20).
2 Install bolt (19), washer (26) and nut (25).
3 Safety nut (25) with cotter pin (24).
4 Apply sealant (Mat. No. 09-013) to centering roller fitting (27) where centering roller fitting (27) contacts emergency exit frame, and to plain shank of bolts (18) (Ref. 51-76-10, P. Block 801).
5 Position centering roller fitting (27) and install bolts (18), washers (21) and nuts (23).

(4)Installation of Lowering Stop Fitting.
(a)Install emergency exit fuselage frame lowering stop fitting (48) (Ref. Fig. 402).
1 Apply grease (Mat. No. 04-004) to contact surfaces between lowering stop (48) and serrated plate attached to emergency exit fuselage frame and to plain shank of bolts (47).
2 Position lowering stop (48) and install bolts (47) and nuts (49).

(5)Installation of Hinge Rod Attach Fittings.
  (a)Install emergency exit threshold hinge rod attach fitting (45) (Ref. Fig. 402).
    1 Apply sealant (Mat. No. 09-013) to hinge rod attach fitting (45) where hinge rod attach fitting (45) contacts emergency exit threshold and to plain shank of bolts (41, 43, 46) (Ref. 51-76-10, P. Block 801).
    2 Position hinge rod attach fitting (45).
    3 Install bolts (41, 43, 46) as previously recorded.
    4 Install nuts (40, 42, 44).
    5 Install hinge rod (Ref. 52-23-21, P. Block 401).
    6 Tension springs of lift compensation mechanism (Ref. 52-23-21, P. Block 401).
(6)Installation of Support Cable Assembly (Ref. Fig. 404).
  (a)Install support cable assembly (82).
    1 Apply sealant (Mat. No. 09-013) to support cable assembly (82) where support cable assembly (82) contacts emergency exit fuselage frame, and to plain shank of bolts (75) (Ref. 51-76-10, P. Block 801).
    2 Position support cable assembly (82) and install bolts (75), washers (80) and nuts (81).
  (b)Install support cable (79).
    1 Position lockwasher (83) and nut (84).
    2 Install support cable (79) and adjustment screw (85). Make certain that adjustment screw (85) is screwed fully into support cable assembly (82).
    3 Attach support cable (79) to spring (87).
    4 Attach upper end of spring (87) to nylon cord.
    5 Withdraw nylon cord from upper end of tube (86) until spring (87) is accessible.
    6 Disconnect nylon cord from spring (87).
    7 Connect spring (87) to bracket (88).
  (c)Attach support cable (79) to emergency exit.
    1 Close emergency exit (Ref. 52-23-00, P. Block 301).
    2 Position support cable (79).
    3 Install pin (76) and washer (77).
    4 Safety pin (76) with cotter pin (78).

E. Test

CAUTION : CARRY OUT ADJUSTMENT/TEST.

(1)Carry out adjustment/test of emergency exit (Ref. 52-23-11, P. Block 501).

F. Close-Up

(1)Apply sealant (Mat. No. 09-019) to form a bead seal between all fittings and structure except upper and lower guide fittings, lowering stop fitting and hinge rod attach fittings (Ref. 51-76-10, P. Block 801).

(2)Apply sealant (Mat. No. 09-016) to form a bead seal between hinge rod attach fittings (46) and threshold (Ref. 51-76-10, P. Block 801) (Ref. Fig. 402).

(3)Check sealant bead (Mat. No. 09-019) around all serrated plates attached to emergency exit fuselage frame and repair if necessary (Ref. 51-76-10, P. Block 801).

(4)Apply moisture-removing oil (Mat. No. 05-027) to all sealant beads (Ref. 51-76-10, P. Block 801).

(5)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition in the following areas and apply if necessary (Ref. 51-75-10, P. Block 801).

(a)All visible interior surfaces and structure of emergency exit.

(b)All visible fuselage structure in area covered by emergency exit fuselage frame linings.

(c)All visible areas below removed floor panels.

(6)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.

(7)Make certain that drain holes of upper and lower guide fittings are not blocked.

(8)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(9)Install floor panels if removed (Ref. 53-10-25, P. Block 401).

(10)Install emergency exit fuselage frame linings if removed (Ref. 25-23-41, P. Block 401).

(11)Install emergency exit insulation, if removed.

(12)Install access panels, if removed.

(13)Install emergency control handle, if removed (Ref. 52-23-22, P. Block 401).

(14)Install overwing escape slide, if removed (Ref. 25-61-23, P. Block 401).

(15)Install escape slide cover (Ref. 52-23-13, P. Block 401).

(16)Close emergency exit (Ref. 52-23-00, P. Block 301).

(17)Remove supports and rubber mats.

WARNING: SPECIAL PRECAUTIONS MUST BE FOLLOWED.

(18)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).

(19)Remove access platform.

FITTINGS - INSPECTION/CHECK

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR EMERGENCY EXITS (REF. 52-23-00, P. BLOCK 301).

NOTE : The LH and RH emergency exit fittings are identical in design and function but are opposite hand. The LH emergency exit fittings only are described and illustrated.

NOTE : Should a defect be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a defect is subsequently proved to exist, a structural repair must be carried out, or component must be replaced.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.80 m (12.50 ft.)
B. 98A52207588001	Gage - Emergency Exit Stop Fittings
C.	Rubber Mats
D.	Supports
E. Material No. 05-002	Special Materials (Ref. 20-31-00)
F. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

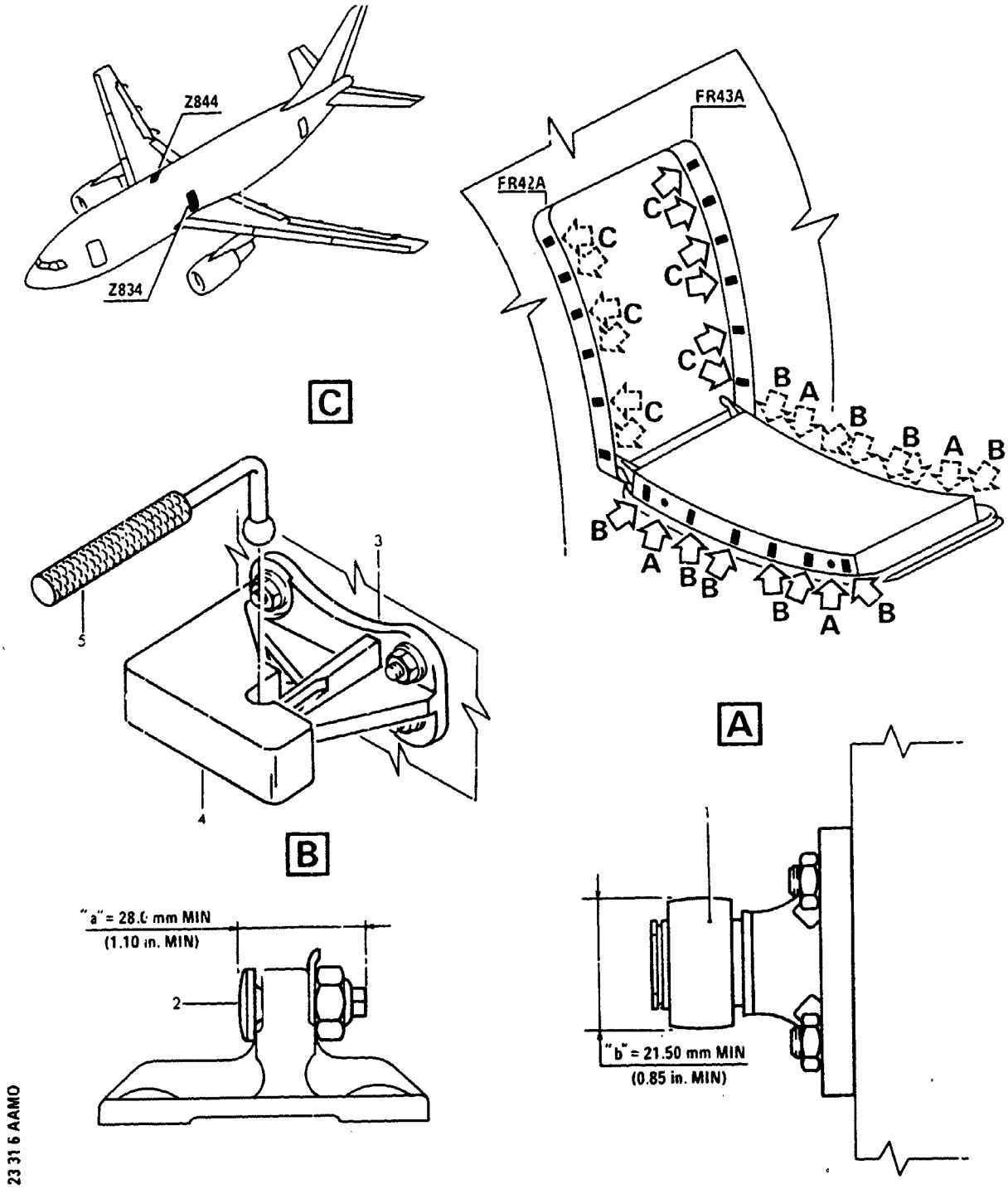
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-11, P. Block 501	Emergency Exit
- 52-23-31, P. Block 401	Fittings

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Position rubber mats and supports.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(3)Carry out before-maintenance procedure (Ref. 52-23-00, P. Block 301).
(4)Open emergency exit (Ref. 52-23-00, P. Block 301).

B. Inspection/Check of Fittings (Ref. Fig. 601)
(1)Inspect fittings for damage.
(2)Check that fittings and hardware are secure and safetied.
(3)Inspect fittings for:
(a)Corrosion. For the removal of corrosion refer to 51-74-10, P. Block 801.
(b)Scratches, marks and dents. For the removal of scratches, marks and dents refer to 51-73-10, P. Block 801.
(c)Satisfactory paint coating. For the repair of paint coatings refer to 51-75-10, P. Block 801.
(d)Deformation. Deformed parts must be replaced.
(4)Check emergency exit fuselage frame stop fittings (3) for wear using gage (4) P/N 98A52207588001. If ball end of mandrel (5) passes thru stop fitting (3) and gage (4), fuselage frame stop fitting (3) must be replaced (Ref. 52-23-31, P. Block 401).
(5)Check that length 'a', of stop screw (2), is not less than 28.0 mm (1.10 in.). Should stated limit be exceeded, stop screw (2) must be replaced and stop fitting adjusted (Ref. 52-23-11, P. Block 501).
(6)Check that roller diameter 'b', of roller fitting (1), is not less than 21.50 mm (0.85 in.). Should stated limit be exceeded, roller (1) must be replaced (Ref. 52-23-31, P. Block 401).
(7)Check sealant for good condition and serviceability. Renew sealant if necessary (Ref. 51-76-10, P. Block 801).

C. Test
(1)Close emergency exit (Ref. 52-23-00, P. Block 301).
(2)Carry out functional test of emergency exit and adjust if necessary (Ref. 52-23-11, P. Block 501).
(3)Open emergency exit (Ref. 52-23-00, P. Block 301).



Fittings
Figure 601

D. Close-Up
(1)Make certain that all protruding thread ends are covered with corrosion-preventive paste (Mat. No. 05-002).
(2)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and apply if necessary (Ref. 51-75-10, P. Block 801).
(3)Make certain that drain holes of upper and lower guide fittings are not blocked.
(4)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(5)Close emergency exit (Ref. 52-23-00, P. Block 301).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED.
(6)Carry out after-maintenance procedure (Ref. 52-23-00, P. Block 301).
(7)Remove rubber mats and supports.
(8)Remove access platform.

CARGO COMPARTMENT DOORS - DESCRIPTION AND OPERATION

1. General

A. Location

The FWD, AFT and BULK cargo compartment doors are located on the lower right fuselage side:

(1) FWD cargo compartment door (zone 811) is located between STA1454/FR20A and STA1729/FR25A.

(2) AFT cargo compartment door (zone 812) is located between STA3236/FR59A and STA3435/FR63A.

(3) BULK cargo compartment door (zone 813) is located between STA3620/FR67 and STA3726/FR69.

**ON A/C 001-003,

B. General Description

(1) FWD and AFT Cargo Compartment Doors

The FWD and AFT cargo compartment doors are mechanically and structurally similar, differing only in size and in the number of hinge arms and locking units. They are of conventional monocoque construction and consist mainly of frames, longerons, stringers and inner and outer skin. The cargo compartment doors open outward and upward and are mechanically locked and unlocked. They open or close hydraulically by means of door actuators pressurized by the electrically driven pump of the yellow hydraulic system.

An alternate procedure permits operation of the FWD and AFT cargo compartment doors by means of the hydraulic hand pump installed in the RH main wheel well.

When the operating handle is in the locked position, a limit switch, located in the lower LH edge of each cargo compartment door, inhibits a hydraulic operation of the door actuator. This limit switch is activated by the rotation of the torque shaft.

When the door sill latches are lowered, the associated limit switches inhibit the closing of the FWD and AFT cargo compartment doors.

The two limit switches of the door warning system, installed in each cargo compartment door, are activated by the locking mechanism and supply a warning signal to the Electronic Centralized Aircraft Monitor (ECAM) system.

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

B. General Description

(1) FWD and AFT Cargo Compartment Doors

The FWD and AFT cargo compartment doors are mechanically and structurally similar, differing only in size and in the number of hinge arms and

locking units. They are of conventional monocoque construction and consist mainly of frames, longerons, stringers and inner and outer skin.
The cargo compartment doors open outward and upward and are mechanically locked and unlocked by means of the operating handles. They open or close hydraulically by means of door actuators pressurized by the electrically driven pump of the yellow hydraulic system.
An alternate procedure permits operation of the FWD and AFT cargo compartment doors by means of the hydraulic hand pump installed in the RH main wheel well.
When the operating handle is in the locked position, the limit switch of the door control system, located in the lower LH edge of each cargo compartment door, inhibits a hydraulic operation of the door actuator. This limit switch is activated by the rotation of the torque shaft.
When the door sill latches are lowered, the associated limit switches inhibit the closing of the FWD and AFT cargo compartment doors.
The two limit switches of the door warning system, installed in each cargo compartment door and activated by the locking mechanism, send signals to the Electronic Centralized Aircraft Monitor (ECAM) system to indicate the locked/unlocked condition of the FWD and/or AFT cargo compartment door in the flight compartment.
The red warning light, located near the operating handle, flashes when residual pressure is present in the FWD or AFT cargo compartment.

**ON A/C ALL

(2)BULK Cargo Compartment Door
The Bulk cargo compartment door which is mechanically locked, opens inward and upward by manual operation from the inside or outside of the Bulk cargo compartment.
The BULK cargo compartment door is an aluminium alloy construction consisting mainly of inner and outer skins, beams and edge members.
A limit switch, activated by the barrel lock, supplies a warning signal to the ECAM system.
NOTE : For detailed description of the BULK cargo compartment door refer 52-34-00.

C. Data
(1)FWD Cargo Compartment Door
Size : 2739 x 2385 mm (108 x 94 in.)
Weight : 190 kg (419 lb.)
(2)AFT Cargo Compartment Door
Size : 1848 x 2400 mm (72 x 94.5 in.)
Weight : 139 kg (306 lb.)
(3)BULK Cargo Compartment Door
Size : 1100 x 940 mm (43 x 37 in.)
Weight : 32 kg (70.4 lb.)

2. Component Location

A. FWD Cargo Compartment Door

**ON A/C ALL

R

(Ref. Fig. 001) (Sheet 1/2)

**ON A/C ALL

R

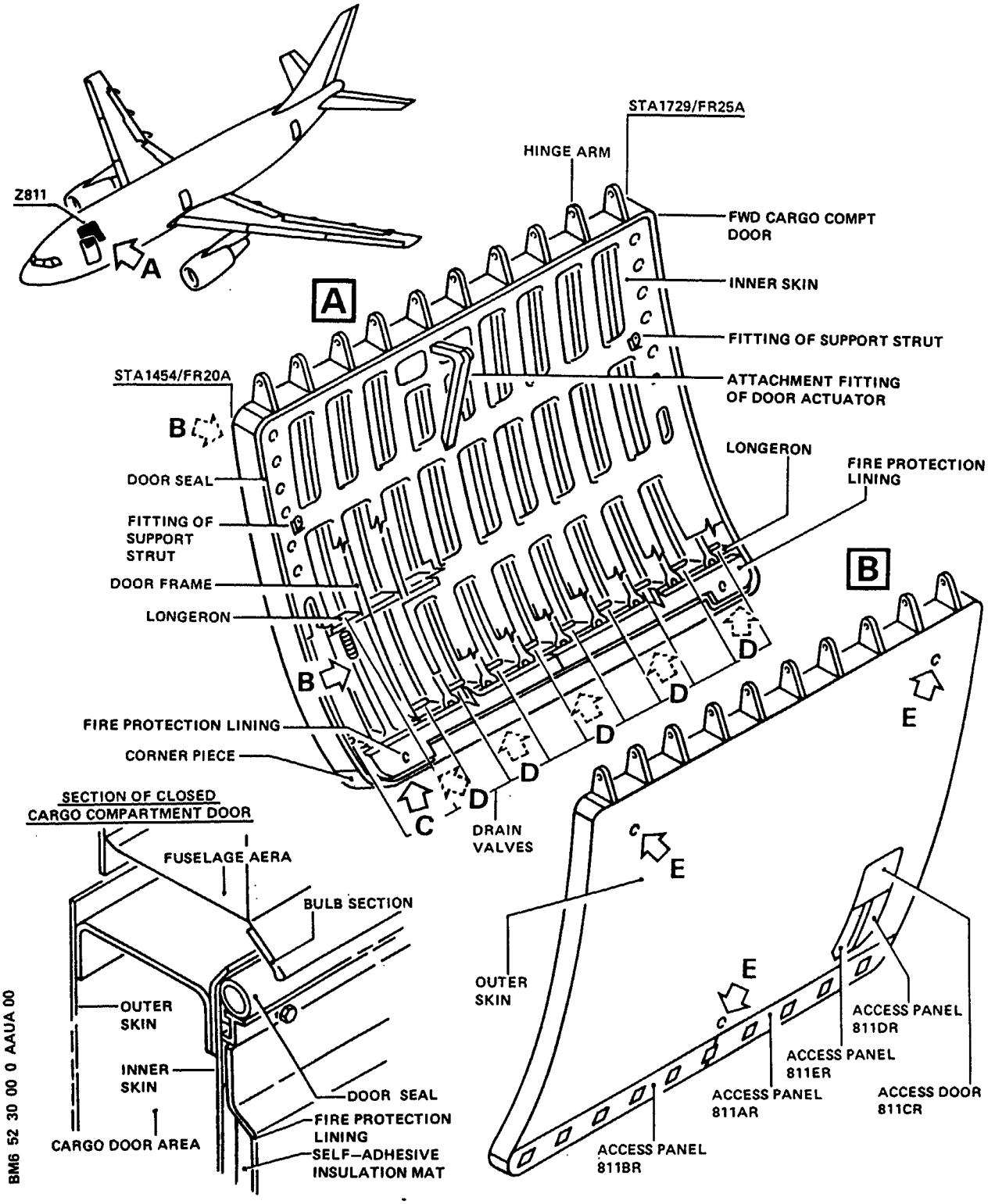
(Ref. Fig. 001) (Sheet 2/2)

**ON A/C ALL

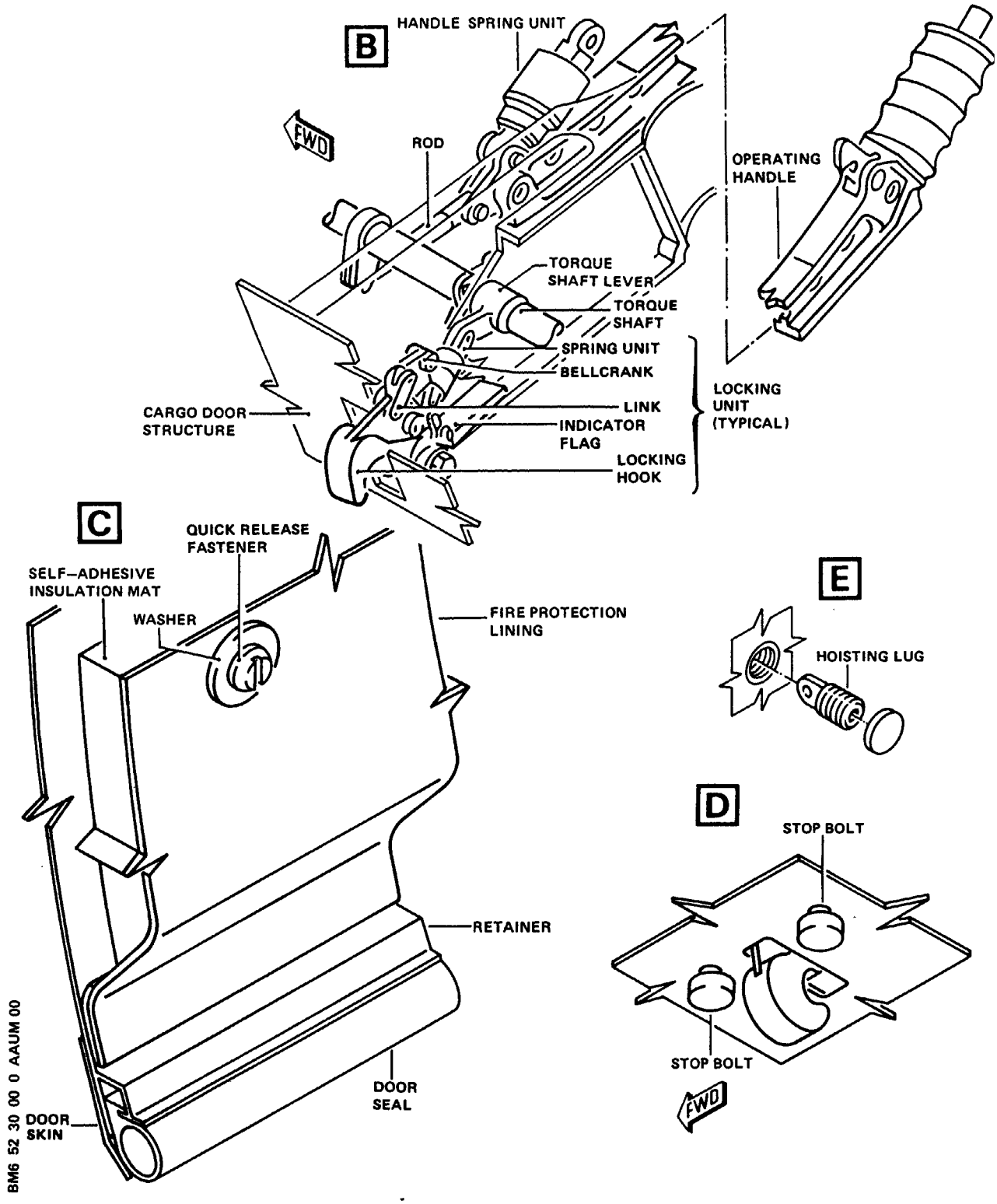
R

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
	FWD CARGO COMPARTMENT DOOR		132	811	52-31-11
	HINGE ARM		132	811	52-31-11
	ACTUATOR ATTACHMENT FITTING		132	811	52-31-11
	CARGO DOOR LINING 811AZ		132	811	52-30-13
	CARGO DOOR LINING 811BZ		132	811	52-30-13
	DRAIN VALVES		132		52-30-00
	DOOR SEAL		132	811	52-30-18
	ACCESS DOOR 811CR				52-30-00
	ACCESS PANEL 811DR				52-30-00
	ACCESS PANEL 811ER				52-30-00
	ACCESS PANEL 811AR				52-30-00
	ACCESS PANEL 811BR				52-30-00
	HOISTING LUG		132		52-31-11
	ROD		132	811AR	52-30-21
	HANDLE SPRING UNIT		132	811DR, 811ER	52-30-21
	OPERATING HANDLE		132	811CR,	52-30-21
	TORQUE SHAFT		132	811AR, 811BR	52-30-21
	LOCKING UNIT		132	811AR, 811BR	52-30-21
	-SPRING UNIT		132	811AR, 811BR	52-30-21
	-BELLCRANK		132	811AR, 811BR	52-30-21

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
	-LINK		132	811AR, 811BR	52-30-21
	-LOCKING HOOK		132	811AR, 811BR	52-30-21
	-INDICATOR FLAG		132	811AR, 811BR	52-30-21
	SWITCH ACTUATING ASSEMBLY		132	811BR	52-30-21



FWD Cargo Compartment Door - Component Location
(Sheet 1/2)
Figure 001



FWD Cargo Compartment Door - Component Location
(Sheet 2/2)
Figure 001

B. AFT Cargo Compartment Door

**ON A/C ALL

R

(Ref. Fig. 002) (Sheet 1/2)

**ON A/C ALL

R

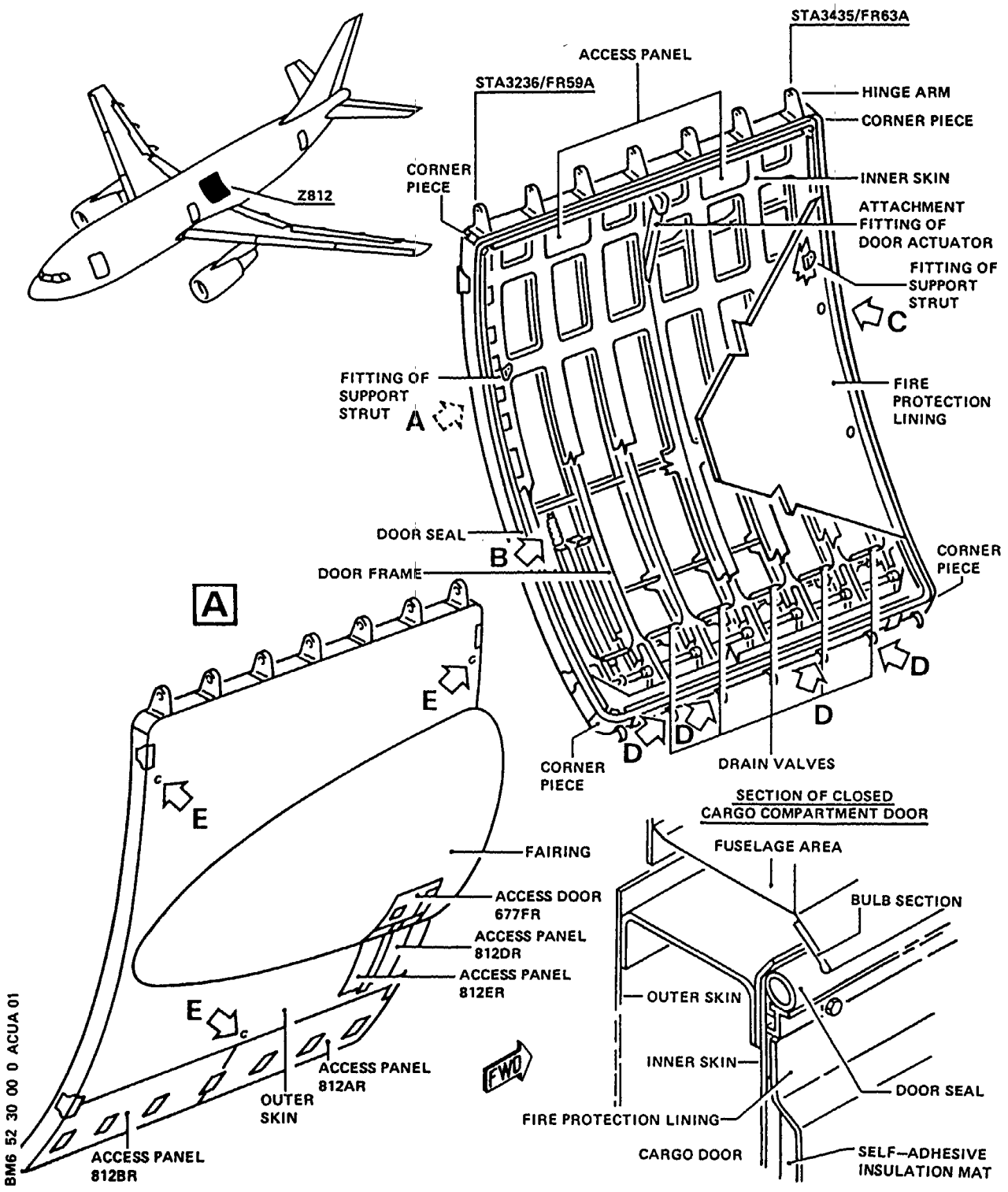
(Ref. Fig. 002) (Sheet 2/2)

**ON A/C ALL

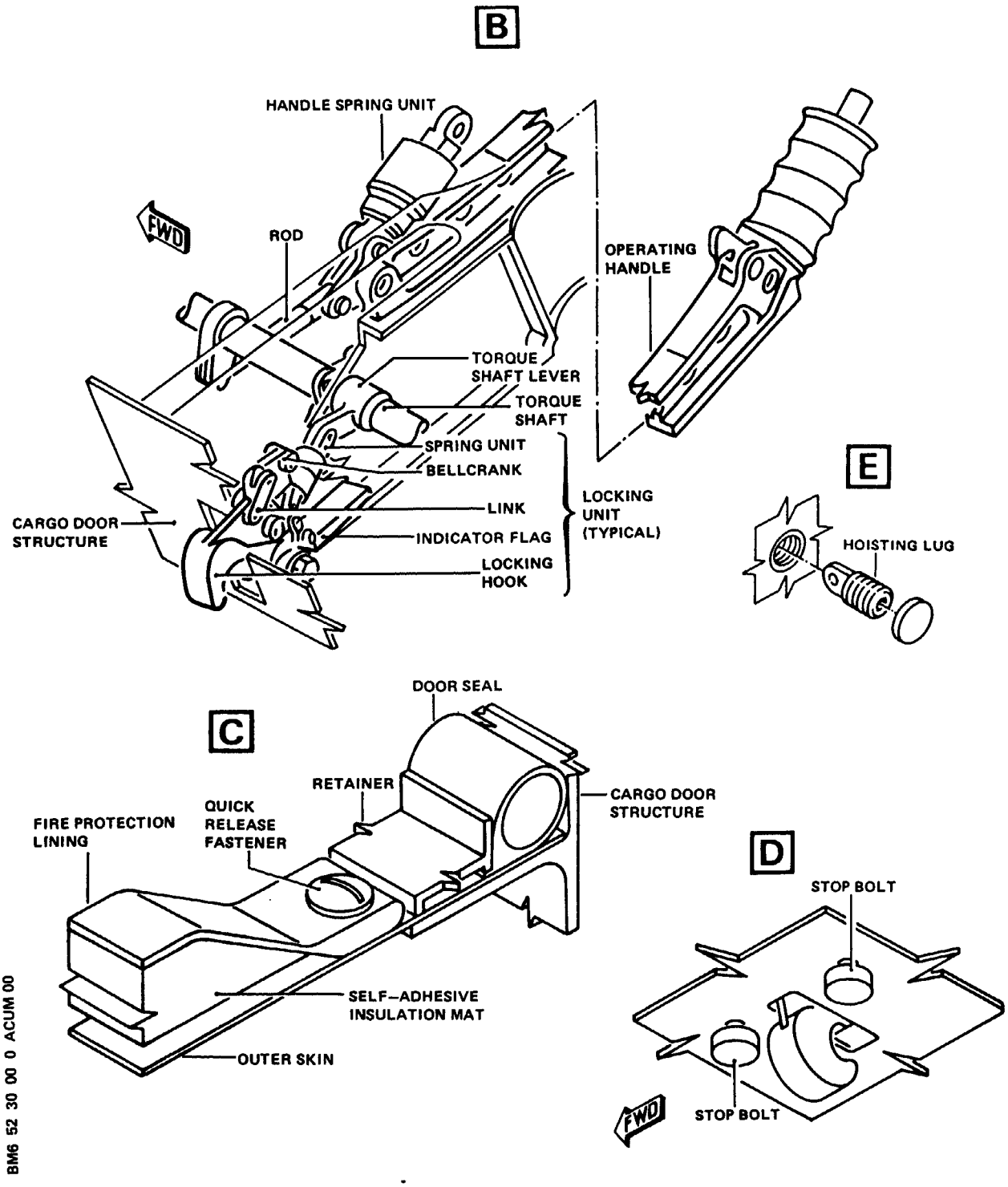
R

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
	AFT CARGO COMPARTMENT DOOR		152	812	52-32-11
	HINGE ARM		152	812	52-32-11
	ACTUATOR ATTACHMENT FITTING		152	812	52-32-11
	CARGO DOOR LINING 812BZ		152	812	52-30-13
	CARGO DOOR LINING 812CZ		152	812	52-30-13
	SWITCH ACTUATING ASSEMBLY		152	812BR	52-30-21
	DRAIN VALVES		152		52-30-00
	DOOR SEAL		152	812	52-30-18
	ACCESS DOOR 811CR		152		52-30-00
	ACCESS PANEL 812DR		152		52-30-00
	ACCESS PANEL 812ER		152		52-30-00
	ACCESS PANEL 812AR		152		52-30-00
	ACCESS PANEL 812BR		152		52-30-00
	HOISTING LUG		152	812	52-30-00
	ROD		152	812AR	52-30-21
	HANDLE SPRING UNIT		152	812DR, 812ER	52-30-21
	OPERATING HANDLE		152	811CR	52-30-21
	TORQUE SHAFT		152	812AR, 812BR	52-30-21
	LOCKING UNIT		152	812AR, 812BR	52-30-21
	-SPRING UNIT		152	812AR, 812BR	52-30-21
	-BELLCRANK		152	812AR, 812BR	52-30-21
	-LINK		152	812AR,	52-30-21

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
				812BR	
	-LOCKING HOOK		152	812AR, 812BR	52-30-21
	-INDICATOR FLAG		152	812AR, 812BR	52-30-21



AFT Cargo Compartment Door - Component Location
(Sheet 1/2)
Figure 002



AFT Cargo Compartment Door - Component Location
(Sheet 2/2)
Figure 002

**ON A/C ALL

3. Description

**ON A/C ALL

R

(Ref. Fig. 001, 002)

**ON A/C ALL

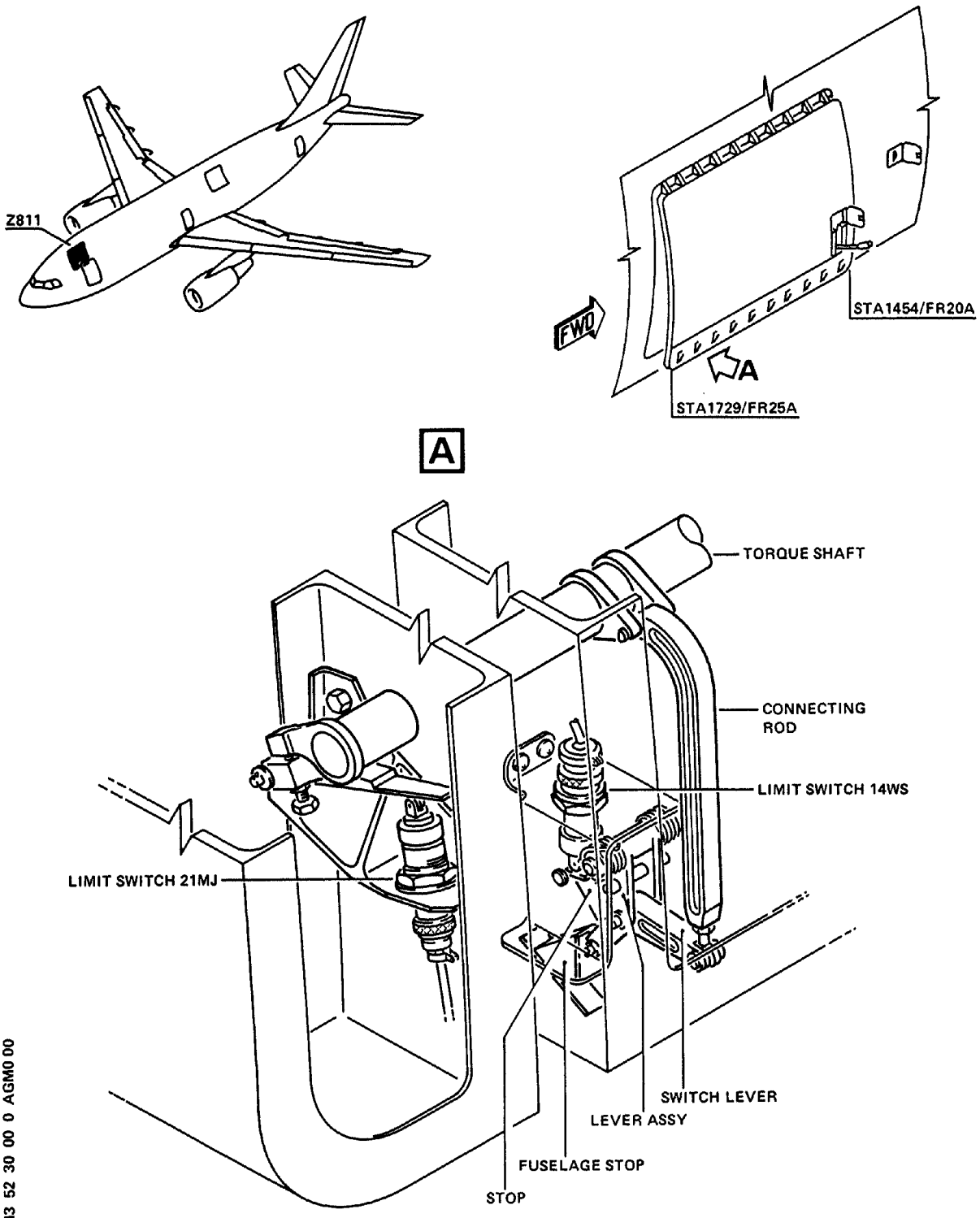
(Ref. Fig. 003)
(Ref. Fig. 004)
(Ref. Fig. 005)

**ON A/C 001-003,

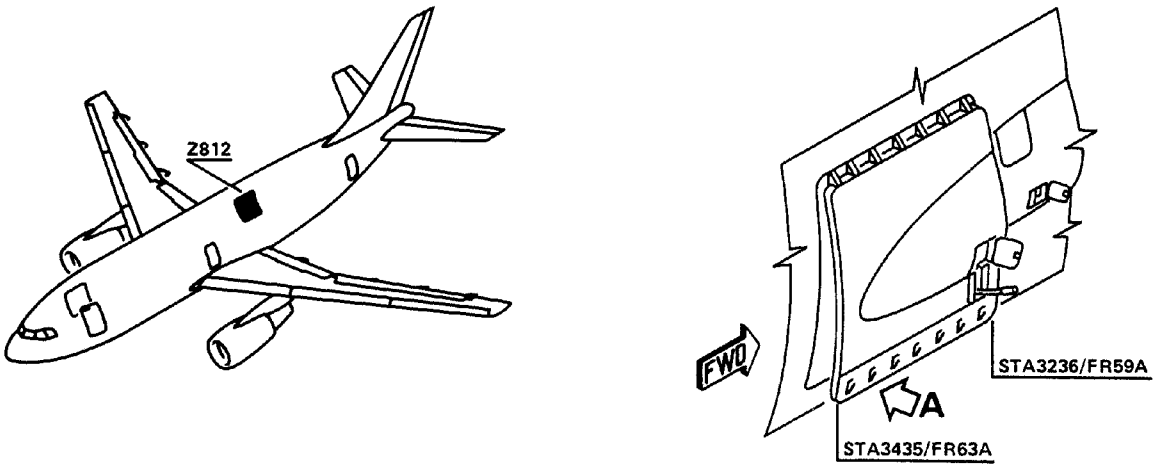
The FWD and AFT cargo compartment doors comprise the following major components:

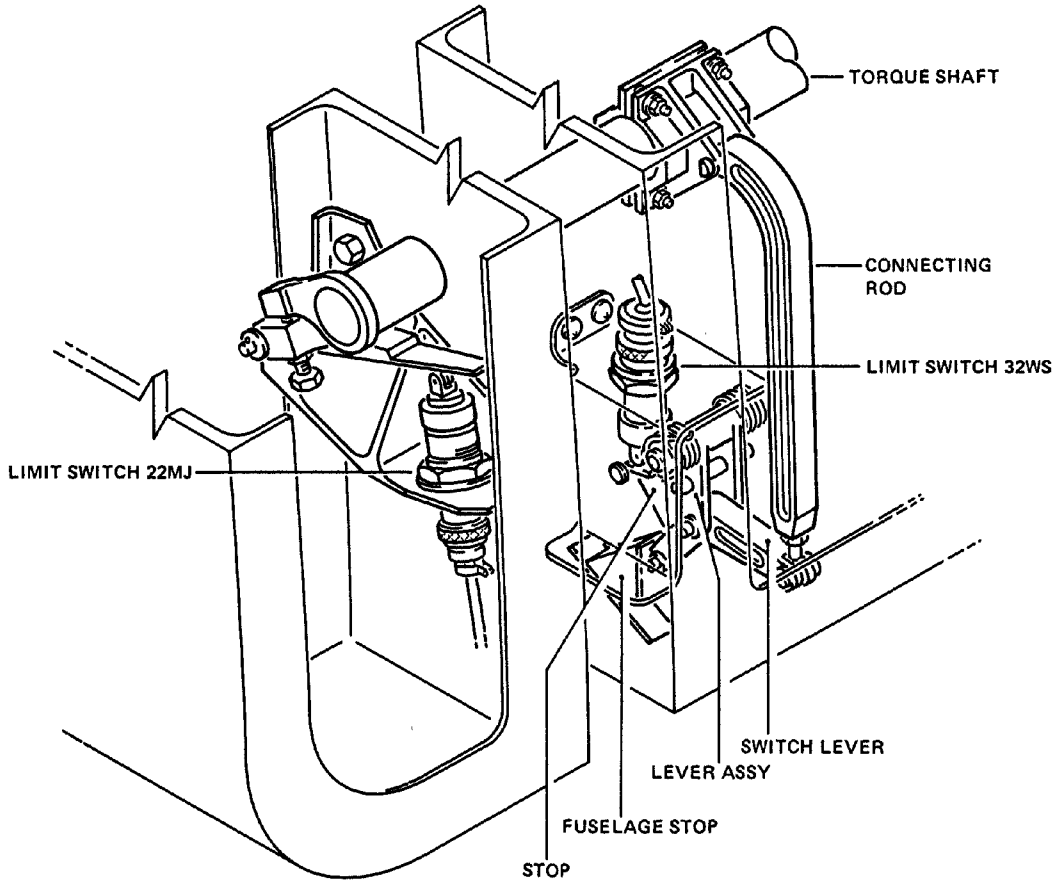
A. Door Structure, Door Seal and Drain Valves
The FWD and AFT cargo compartment doors are structurally similar, differing only in size and in number of hinge arms and door frames. The inner and outer skins are manufactured from fabricated sheet metal with integral vertical and horizontal edge members, frames and longitudinal beams. All parts are riveted together to form a torsion-resistant door. The door frames are milled to match the fuselage contour with the extended frames forming the hinge arms at the upper ends. The lower ends are machined to accommodate the door locking mechanisms.

The outer skin of each cargo compartment door is provided with a recess for installation of the operating handle. This recess is covered by an access panel.
Hoisting lugs are installed in the outer skin of each cargo compartment door to fasten the sling used for removal/installation of the door by means of a crane.
The attachment fitting of the door actuator is located on the inside of the cargo compartment door near the top horizontal edge member. Fittings, attached to the forward and aft door frames, permit the installation of support struts during servicing procedures.
Access panels and covers are provided at various locations on the outer skin of each cargo compartment door to facilitate removal/installation, adjustment/test and/or servicing of the locking mechanism and hydraulic components. The door seal, made from special rubber hose, is attached on the inside of each cargo compartment door by means of retainers, screws and anchor nuts. When the cargo compartment door is closed, the door seal is pressed on a bulb section installed on the door frame of the

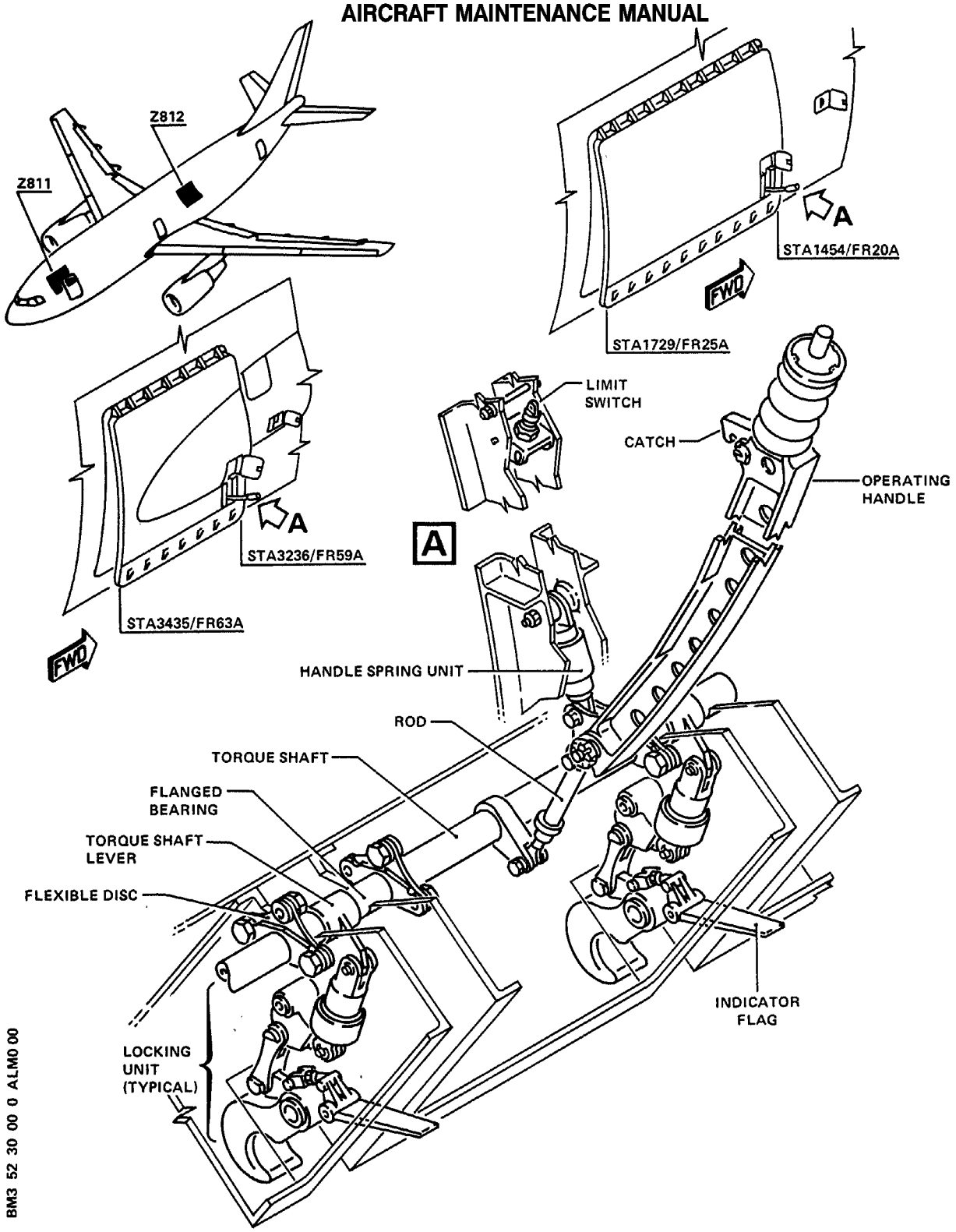


FWD Cargo Compartment Door -
Interlock Switch and Actuating Mechanism
Figure 003





AFT Cargo Compartment Door -
Interlock Switch and Actuating Mechanism
Figure 004



FWD and AFT Cargo Compartment Door -
Locking Mechanism
Figure 005

fuselage, providing a pressure-tight interface.
The FWD cargo compartment door is equipped with 11 flap-type drain valves and the AFT cargo compartment door with 5 flap-type drain valves. These valves are installed in the longeron near the outer skin. To allow liquid to escape, the drain valves are open on the ground. During flight the valves are closed by differential pressure.

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

The FWD and AFT cargo compartment doors comprise the following major components:

A. Door Structure, Door Seal and Drain Valves
The FWD and AFT cargo compartment doors are structurally similar, differing only in size and in number of hinge arms and door frames.
The inner and outer skins are manufactured from fabricated sheet metal with integral vertical and horizontal edge members, frames and longitudinal beams. All parts are riveted together to form a torsion-resistant door.
The door frames are milled to match the fuselage contour with the extended frames forming the hinge arms at the upper ends. The lower ends are machined to accommodate the door locking mechanisms.
The outer skin of each cargo compartment door is provided with a recess for installation of the operating handle. In this recess covered by an access panel there are provisions to install a red warning light indicating a residual pressure in the cargo compartment.
Hoisting lugs are installed in the outer skin of each cargo compartment door to fasten the sling used for removal/installation of the door by means of a crane.
The attachment fitting of the door actuator is located on the inside of the cargo compartment door near the top horizontal edge member. Fittings, attached to the forward and aft door frames, permit the installation of support struts during servicing procedures.
Access panels and covers are provided at various locations on the outer skin of each cargo compartment door to facilitate removal/installation, adjustment/test and/or servicing of the locking mechanism and hydraulic components. The door seal, made from special rubber hose, is attached on the inside of each cargo compartment door by means of retainers, screws and anchor nuts. When the cargo compartment door is closed, the door seal is pressed on a bulb section installed on the door frame of the fuselage, providing a pressure-tight interface.
The FWD cargo compartment door is equipped with 11 flap-type drain valves, the AFT cargo compartment door with 5 flap-type drain valves. These valves are installed in the longeron near the outer skin. To allow liquid to escape, the drain valves are open on the ground. During flight the valves are closed by differential pressure.

**ON A/C ALL

B. Door Lining and Insulation
The FWD and AFT cargo door linings comprise two parts attached with Velcro tapes and quick-release fasteners on the inner skin of the FWD and AFT cargo compartment door. Each cargo door lining consists of a fire protection lining made of prepreg and a self-adhesive insulation foam mounted on the inside of the lining.

C. Door Locking Mechanism
The locking mechanism is installed in the lower section of each cargo compartment door and is actuated by the operating handle. This handle is retained in a recess of the door outer skin by means of a catch. The locking mechanism operates locking hooks, the interlock switch mechanism of the yellow hydraulic system and the limit switch of the door warning system. The operating handle is connected via a rod to the multi-sectioned torque shaft. The torque shaft is joined via flexible discs to the flanged bearings, located in fork ends of each door frame.
The torque shaft levers, parts of the flanged bearings, connect the torque shaft to the locking units, each consisting of a spring unit, bellcrank, link, indicator flag and locking hook.
A handle spring unit is installed between operating handle and door frame. This spring unit secures the operating handle in its respective position.
The adjustable stop bolts are installed near the locking hooks to interrupt the closing movement when the lower edge of the cargo compartment door is flush with the fuselage contour.

4. Operation

**ON A/C 001-003,

(Ref. Fig. 006)

R **ON A/C ALL

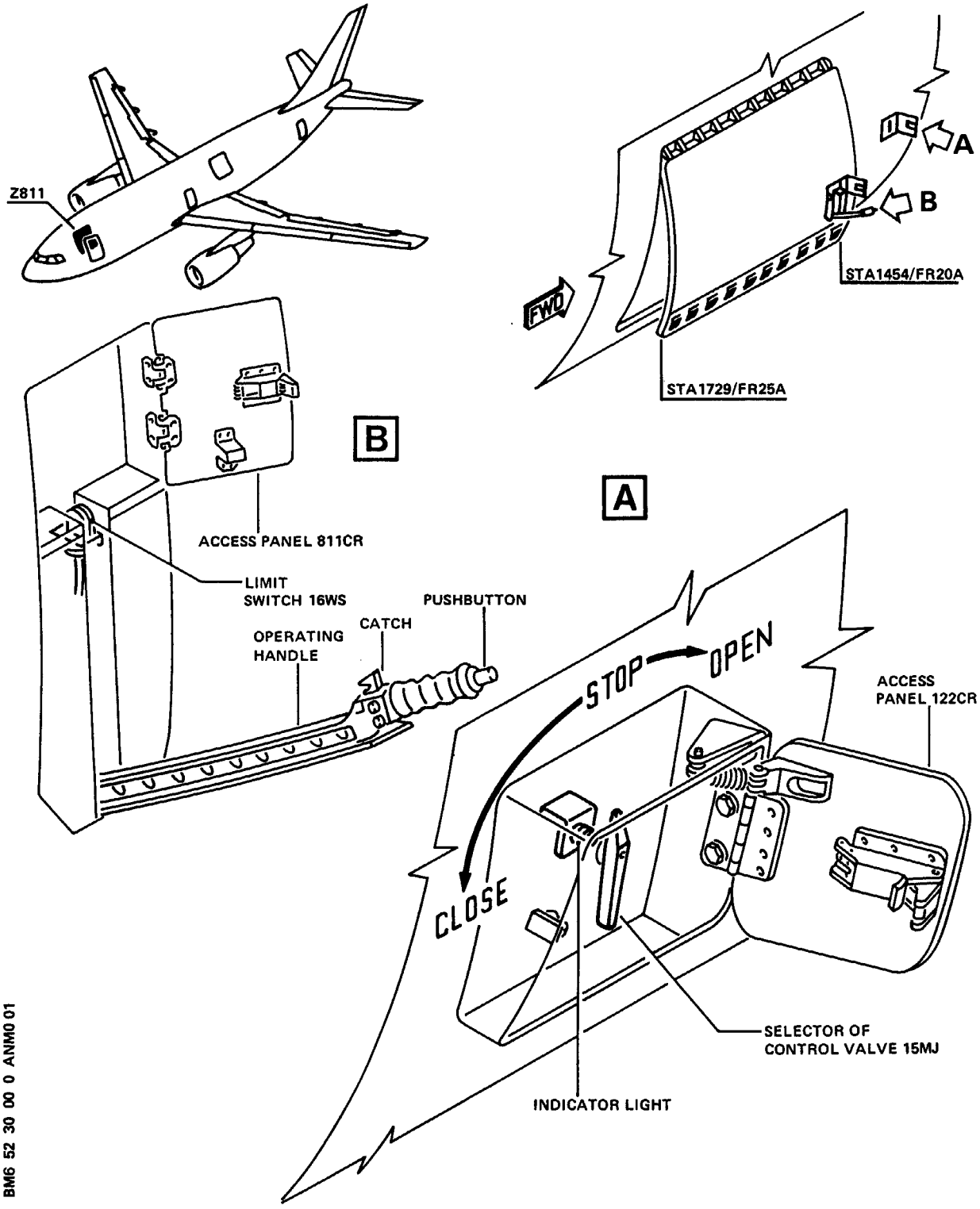
R Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 007)

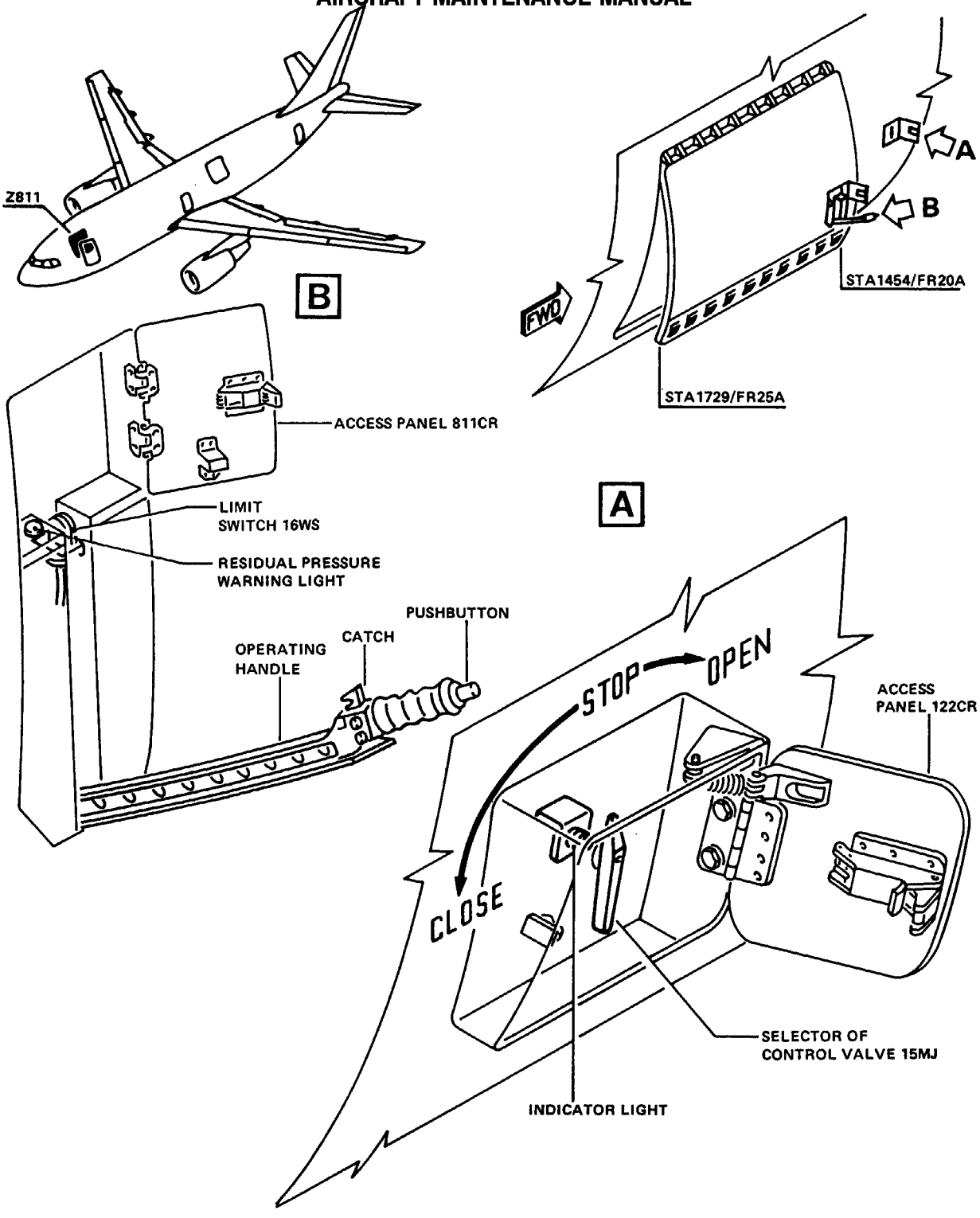
**ON A/C 001-003,

(Ref. Fig. 008)

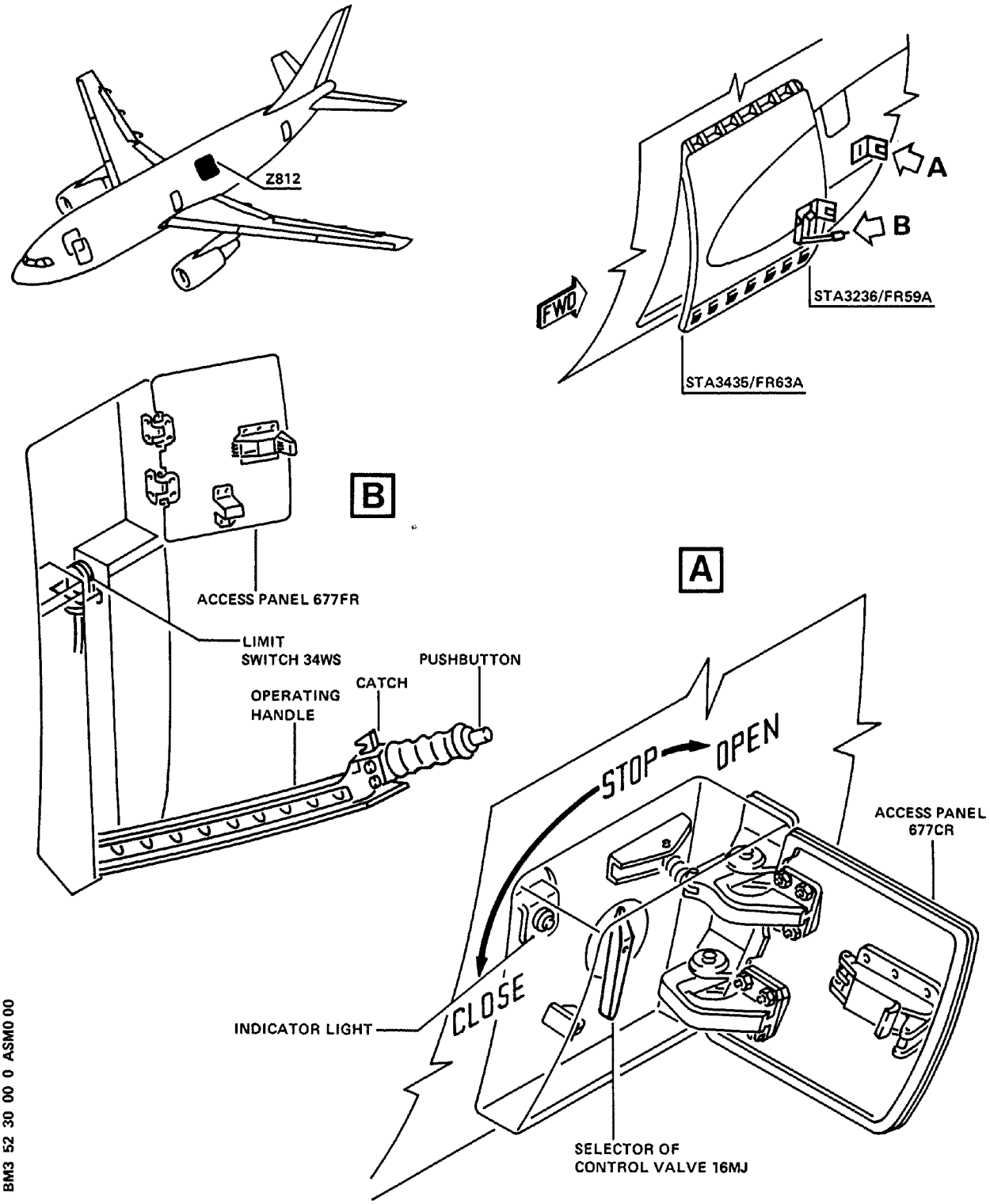
R **ON A/C ALL



FWD Cargo Compartment Door - Normal Operation
Figure 006



FWD Cargo Compartment Door - Normal Operation
Figure 007



AFT Cargo Compartment Door - Normal Operation
Figure 008

R Post SB 52-2039 For A/C 001-003,

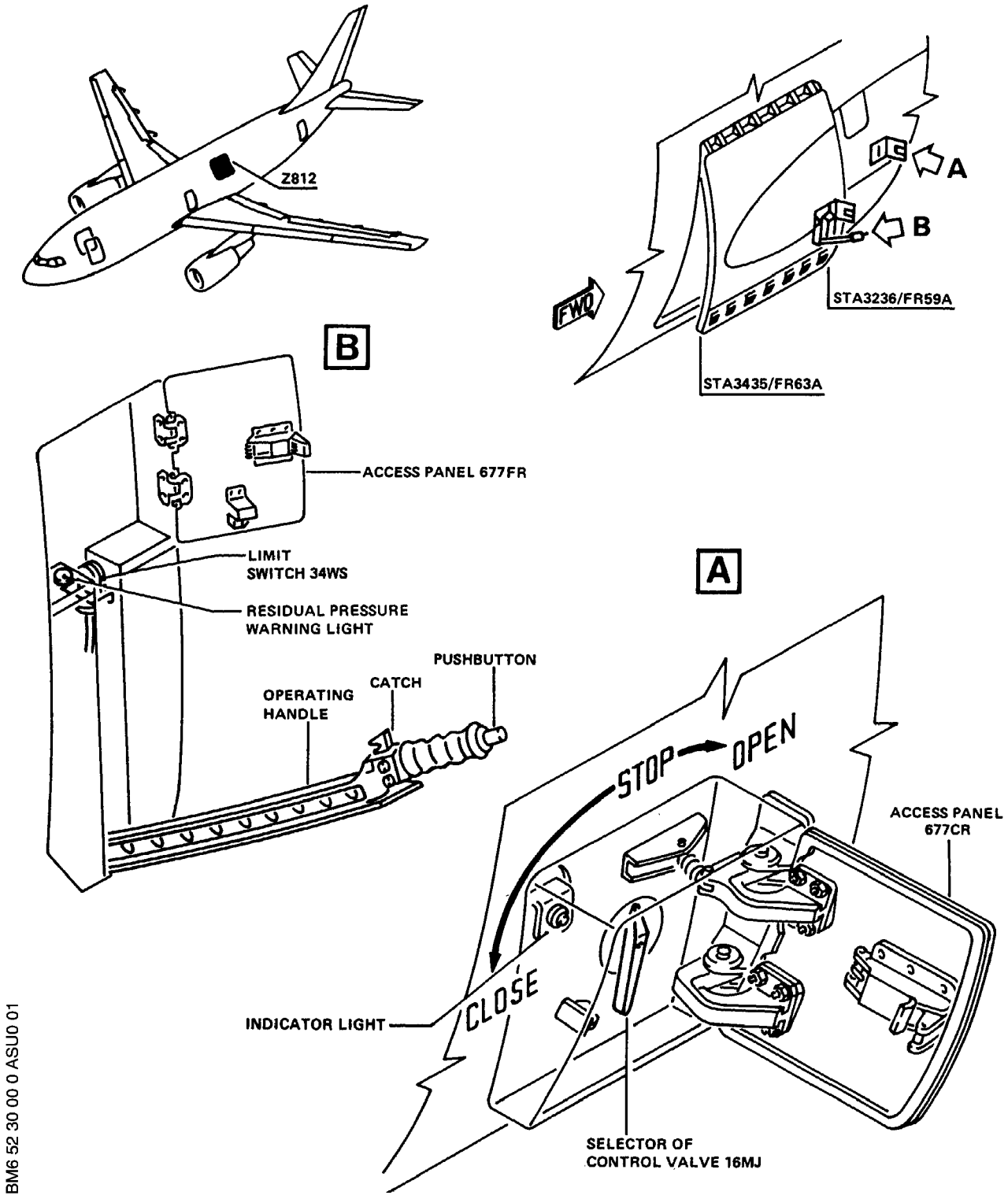
(Ref. Fig. 009)

**ON A/C ALL

(Ref. Fig. 010)
(Ref. Fig. 011)

A. Unlocking and Opening of FWD and AFT Cargo Compartment Doors
(1)When the pushbutton in the operating handle is pressed, a catch is released allowing the operating handle to move out slightly from its recess under the influence of the spring unit. A limit switch 16WS (FWD) or 34WS (AFT) actuated by the catch is opened to provide a signal to the ECAM system and illuminates the MASTER CAUTION lamp located on the main instrument panel and a single chime aural warning sounds simultaneously.
(2)As the operating handle is pulled down to its maximum extent, the rod, mounted on the operating handle, rotates the torque shaft which, in turn, releases the locking elements. When the operating handle is fully extended, the handle spring unit moves overcenter, prohibiting the handle movement up to dead-center position.
(3)The maximum operating handle movement is limited to approximately 108 degrees by a stop located in the handle spring unit, at which position the locking hooks are clear of the fuselage fittings. The unlocking sequence occurs at the following approximate angles of operating handle movement:
(a) 11 degrees - Spring units attached to lever assemblies, which are mounted on the torque shaft, transfer torque shaft rotation via bellcranks and links to locking hooks.
(b) 36 degrees - Bellcranks and links move overcenter.
(c) 44 degrees - Simultaneously, locking hooks start to clear fuselage fittings and indicator flags start to project from door.
(d)102 degrees - Rotation of torque shaft, transferred via a switch mechanism, operates limit switch 21MJ (FWD) or 22MJ (AFT) to energize the electro-mechanical selector valve 9MJ or 10MJ and permits hydraulic pressure to the door actuator when the selector of manual selector valve 15MJ (FWD) or 16MJ (AFT) is set to the OPEN position.
(4)With the FWD or AFT cargo compartment door unlocked, setting the selector to the OPEN position will route 28 V DC via the series-connected limit switches to the electro-mechanical selector valve 9MJ or 10MJ. Hydraulic pressure is then applied to the actuator, which extends to open the FWD or AFT cargo compartment door. When the door is fully open and locked, the actuator limit switch 7MJ (FWD) or 8MJ (AFT) closes and the green indicator light on the selector panel comes on. The selector is spring-loaded to the STOP position and, therefore, must be held in the OPEN position during opening of the FWD or AFT cargo compartment door until the green indicator light comes on.

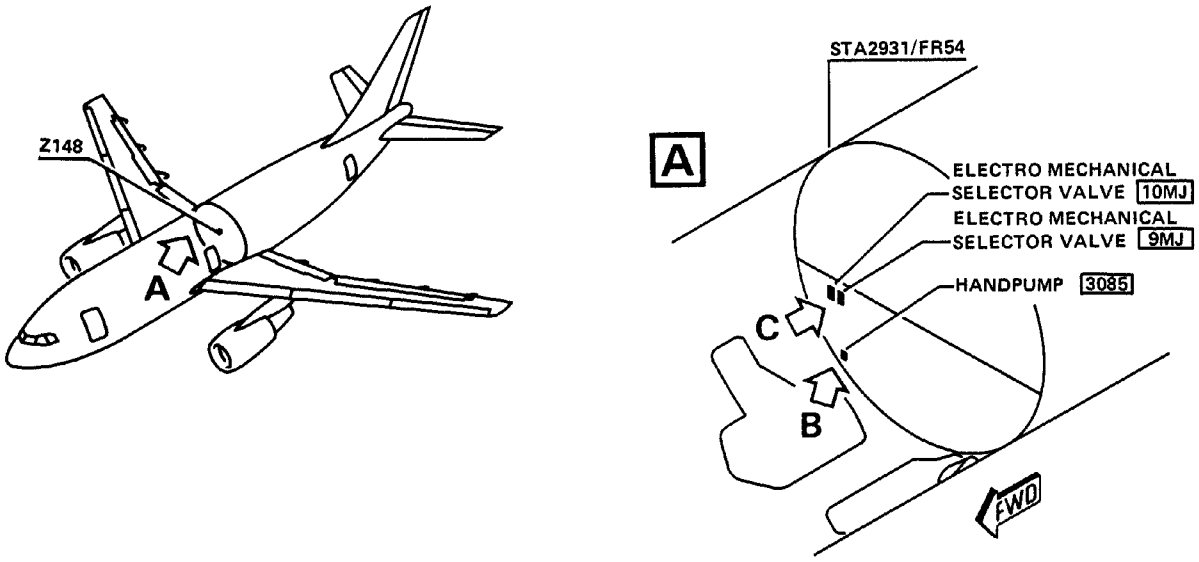
B. Closing and Locking of FWD and AFT Cargo Compartment Doors
(1)Setting the selector of manual selector valve 15MJ (FWD) or 16MJ (AFT)



BM6 52 30 00 0 ASU0 01

AFT Cargo Compartment Door - Normal Operation
Figure 009

R

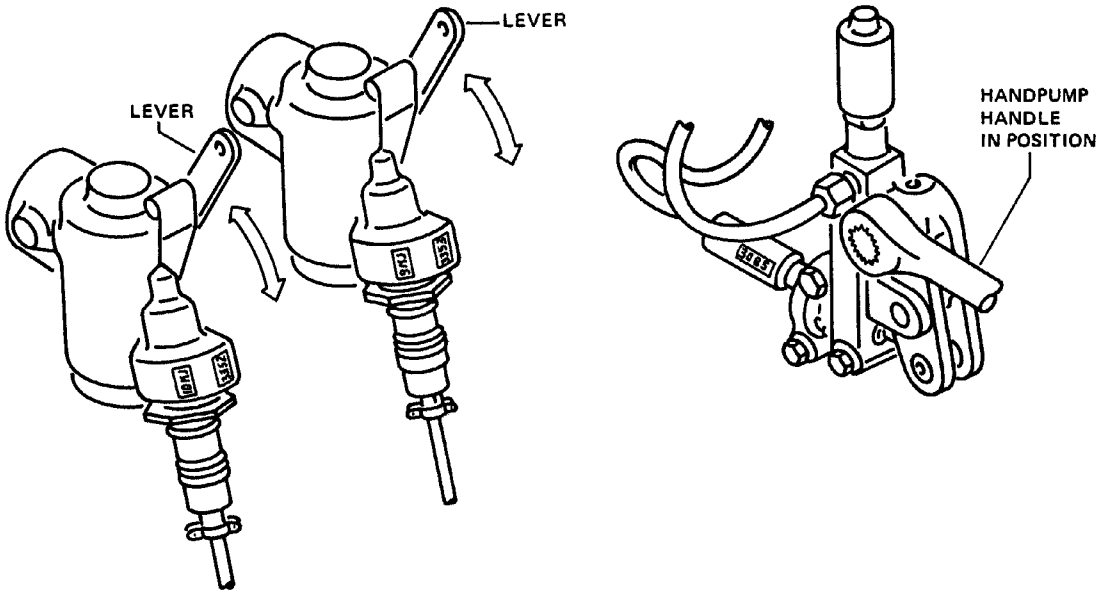


C

ELECTRO MECHANICAL SELECTOR VALVES 10MJ AND 9MJ

B

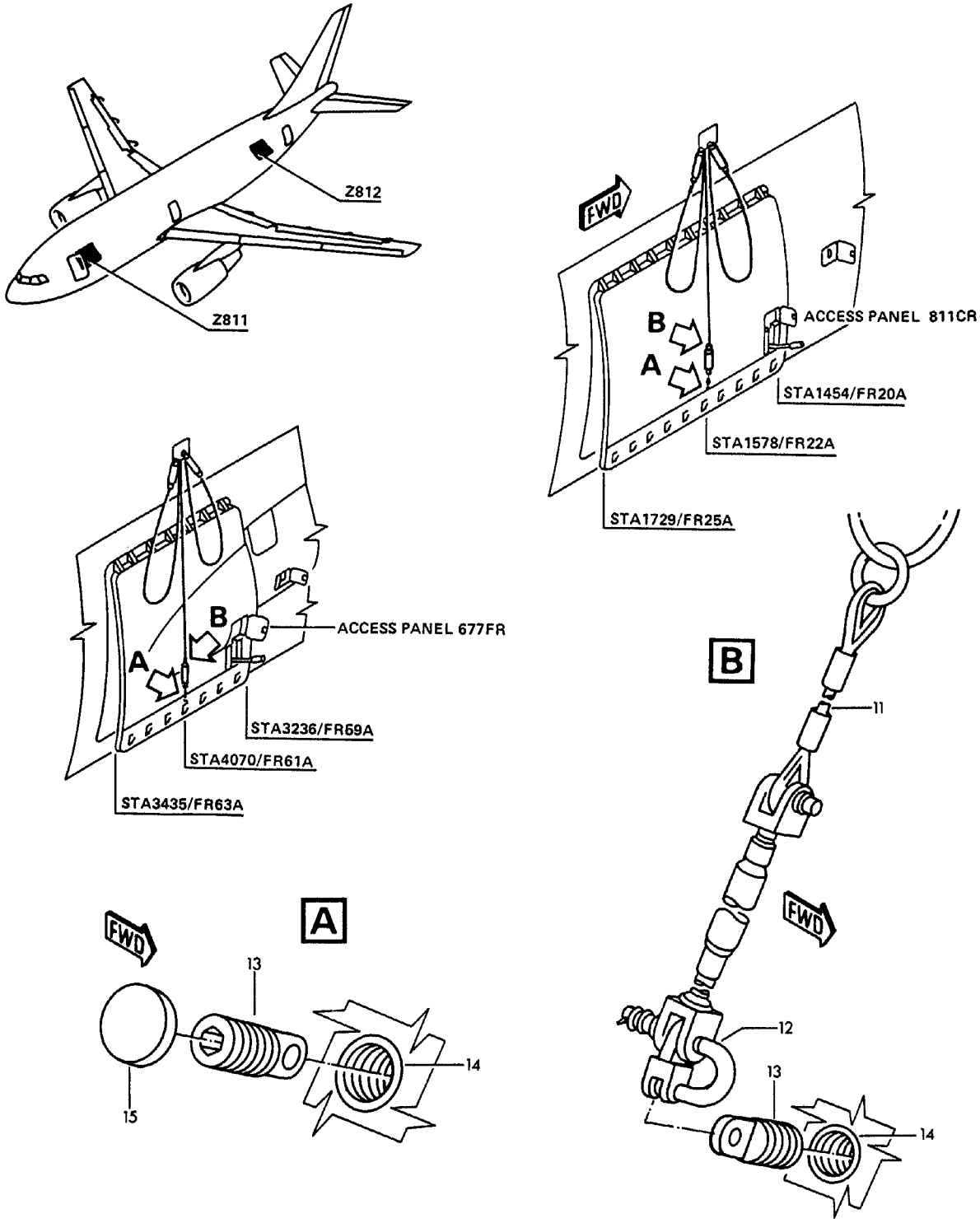
HANDPUMP 3085



NOTE: LEVERS SHOWN IN POSITION FOR NORMAL OPERATION.
PUSH DOWN FOR AUXILIARY OPERATION.

BM3 52 30 00 0 ATM0 00

FWD and AFT Cargo Compartment Door
Manual Operation
Figure 010



FWD and AFT Cargo Compartment Door
Auxiliary Operation
Figure 011

to the CLOSED position will cause the door actuator to retract and the FWD or AFT cargo compartment door to close. The green indicator light goes off. The FWD or AFT cargo compartment door is locked by returning the operating handle fully into its recess to latch it in position.

(2) During the movement of the operating handle, the sequence of events relative to the approximate position of the operating handle is as follows:

(a) 6 degrees - Rotation of torque shaft operates limit switch 21MJ (FWD) or 22MJ (AFT) to de-energize the electro-mechanical selector valve 9MJ or 10MJ and to shut off hydraulic pressure to the door actuator.

(b) 64 degrees - Locking hooks engage with fuselage lock fittings and indicator flags are flush with cargo door surface.

(c) 72 degrees - Links and bellcranks move overcenter. Overcenter travel is limited by a stop.

(d) 97 degrees - Rotation of the torque shaft causes an operation in the switch actuating mechanism, activating limit switch 14WS (FWD) or 32WS (AFT) of the door warning system.

NOTE : Limit switch may be activated when the roller of the switch lever contacts the fuselage stop, producing a force which positions the stop of the switch lever with the roller of the limit switch and loads the torsion spring mounted on the lever assy.
If the FWD or AFT cargo compartment door is not correctly closed but the operating handle is locked in the recess, this force cannot be produced, because the roller of the switch lever is not in contact with the fuselage stop. The torsion spring therefore disengages the stop of the switch lever from the contact of limit switch.

(3) When the operating handle of the FWD and/or AFT cargo compartment door is returned to, and locked in the recess, limit switches 16WS (FWD) and 34WS (AFT) are activated.
A ground signal is fed via limit switches 14WS and 16WS (FWD), 32WS and 34WS (AFT) to the ECAM system.
When the cargo compartment doors are correctly closed and locked, the MASTER CAUTION lamp located on the main instrument panel goes off.

C. Opening and Closing of FWD and AFT Cargo Compartment Doors with Hand Pump

NOTE : A second person is required to operate the hand pump.

(1) In the event of non-availability of hydraulic power, the actuator can be extended and retracted by means of a hand pump located in the RH main wheel well.

(2) Prior to opening or closing the door when utilizing the hand pump, make certain that selector valves 9MJ (FWD) and 10MJ (AFT) in the RH main wheel well are closed.

(3) To open the door, depress pushbutton on operating handle and pull handle downwards to its stop. Make certain that all indicator flags are extended. Set the selector switch to the OPEN position and operate the hand pump until the cargo compartment door is fully open.

NOTE : A considerable increase in force is felt on the hand pump handle if the door actuator is in its extended, locked position.

(4)To close the door, set the selector switch to CLOSE and operate the hand pump until the door is closed. Lock the door by returning the operating handle to its recess and lock it in position. Make certain that all indicator flags are returned and flush with the door.
NOTE : When closing the door from an intermediate position, the door will first move in the open direction until suffiecient pressure is built up in the sequence valve to reach the changeover position; the door will then close.

5. Opening and Closing Procedure

CAUTION : WHEN WIND SPEED IS EXPECTED TO EXCEED 60 KNOTS:
- DO NOT OPEN FWD OR AFT CARGO COMPARTMENT DOOR.
- IF FWD OR AFT CARGO COMPARTMENT DOOR IS OPEN, CLOSE IMMEDIATELY.

**ON A/C 001-003,

A. Opening by Means of Electric Hydraulic Pump (Ref. Fig. 006, 008)

WARNING : RESIDUAL PRESSURE COULD CAUSE THE CARGO COMPARTMENT DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : BEFORE SUPPLYING AIR BY EXTERNAL SOURCE OR APU MAKE CERTAIN THAT:
- AT LEAST ONE FLT COMPT WINDOW OR CABIN DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
- IF THE A/C IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR, OR AVIONICS ACCESS DOOR 121BL IS OPEN AND REMAINS OPEN DURING SERVICING.

(1)Make certain that the aircraft electrical network is energized and that electronics racks ventilation is correct.
(2)Open access panel 811CR (677FR).
(3)Depress pushbutton on operating handle and pull operating handle downwards from recess.
(4)Check that all indicator flags are extended.
(5)Open access panel 122CR (677DR).
(6)Turn selector to OPEN position and hold until FWD or AFT cargo compartment door is fully open and the green indicator light comes on.
(7)Release selector. Selector returns to STOP position.

B. Closing by Means of Electric Hydraulic Pump (Ref. Fig. 006, 008)

NOTE : Make certain that the manually operated YZ-latches of the door sill latches are raised (Ref. 52-35-00, P. Block 1).

(1)Make certain that the aircraft electrical network is energized and that electronics racks ventilation is correct.
(2)Turn selector to CLOSE position and hold until the FWD or AFT cargo compartment door is closed. The green indicator light of the service panel goes off as soon as the cargo compartment door moves in the

closing direction.
(3)Release selector. Selector returns to STOP position.
(4)Push operating handle upwards into the recess until it locks.
(5)Check that all indicator flags are retracted and flush with cargo door.
(6)Close access panels 811CR (677FR) and 122CR (677DR).

C. Opening by Means of Hand Pump (Ref. Fig. 010)

WARNING : RESIDUAL PRESSURE COULD CAUSE THE CARGO COMPARTMENT DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : BEFORE SUPPLYING AIR BY EXTERNAL SOURCE OR APU MAKE CERTAIN THAT:
- AT LEAST ONE FLT COMPT WINDOW OR CABIN DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
- IF THE A/C IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR, OR AVIONICS ACCESS DOOR 121BL IS OPEN AND REMAINS OPEN DURING SERVICING.

NOTE : A second person is required to operate the hand pump.

(1)Open access panel 811CR (677FR).
(2)Depress pushbutton on operating handle and pull operating handle downwards from recess.
(3)Check that all indicator flags are extended.
(4)Open access panel 122CR (677DR).
(5)Open main gear main doors (Ref. 32-12-11, P. Block 301).
(6)Pushdown lever of both selector valves 9MJ (FWD) and 10MJ (AFT) located in RH main wheel well for manual operation.
(7)Turn selector to OPEN position and hold.
(8)Operate hand pump located in RH main wheel well until the FWD or AFT cargo compartment door is fully open.

NOTE : A considerable increase in force is felt on the hand pump handle if the door actuator is in its extended, locked position.

(9)Release selector. Selector returns to STOP position.

D. Closing by Means of Hand Pump (Ref. Fig. 010)

NOTE : A second person is required to operate the hand pump.

(1)Make certain that both levers of selector valves 9MJ and 10MJ located in RH main wheel well are pushed down for manual operation.
(2)Turn selector to CLOSE position and hold.
(3)Operate hand pump located in RH main wheel well until the FWD or AFT cargo compartment door is closed.
(4)Release selector. Selector returns to STOP position.
(5)Push operating handle upwards into recess until it locks.
(6)Check that all indicator flags are retracted and flush with cargo door.
(7)Set levers of both selector valves 9MJ (FWD) and 10MJ (AFT) located in RH

main wheel well to normal position.
(8)Close main gear main doors (Ref. 32-12-11, P. Block 301).
(9)Close access panels 811CR (677FR) and 122CR (677DR).

E. Opening by Means of Crane (Ref. Fig. 011)

NOTE : This procedure must be used in case of hydraulic system failure or in case of a defective door actuator.

(1)Attach cargo door sling PN 98A52307529001 to crane.
(2)Peel off self-adhesive patch (15), remove hoisting lug (13) from lower hoist fitting (14) and re-install hoisting lug (13) with eye outwards.

WARNING : RESIDUAL PRESSURE COULD CAUSE THE CARGO COMPARTMENT DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : BEFORE SUPPLYING AIR BY EXTERNAL SOURCE OR APU MAKE CERTAIN THAT:
- AT LEAST ONE FLT COMPT WINDOW OR CABIN DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
- IF THE A/C IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR, OR AVIONICS ACCESS DOOR 121BL IS OPEN AND REMAINS OPEN DURING SERVICING.

(3)Open access panel 811CR (FWD) or 677FR (AFT).
(4)Depress pushbutton on operating handle and pull operating handle downwards from recess.
(5)If door actuator is still installed, proceed as follows:
(a)Open access panel 122CR (FWD) or 677DR (AFT).
(b)Turn selector to OPEN position and hold.
(6)Attach fastener (12) of cargo door sling (11) to lower hoisting lug (14) and lift cargo compartment door by means of crane to fully open position.
(7)Release selector, if turned. Selector returns to STOP position. Close access panel 122CR (FWD) or 677DR (AFT).
(8)Install support struts PN 98A52307523000 on cargo compartment door.
(9)Replace defective door actuator (Ref. 52-33-18, P. Block 401).

F. Closing by Means of Crane (Ref. Fig. 011)

NOTE : This procedure must be used when the FWD or AFT cargo compartment door is in open position and cannot be closed in case of a defective door actuator or hydraulic system failure.

(1)Attach cargo door sling (11) PN 98A52307529001 to crane.
(2)Peel off self-adhesive patch (15), remove lower hoisting lug (13) from hoist fitting (14) and re-install hoisting lug (13) with eye outwards.
(3)Attach fastener (12) of cargo door sling (11) to lower hoisting lug (14) and use crane until cargo door sling (11) is tight.
(4)Deactivate yellow hydraulic system (Ref. 29-10-00, P. Block 301).

CAUTION : AFTER DISCONNECTION OF HYDRAULIC PIPES FROM FAILED COMPONENT, PRESSURE BLANKS MUST BE INSTALLED TO PIPE ENDS AND COMPONENT CONNECTIONS.

(5)Disconnect hydraulic pipes from defective component and blank off open ends.
(6)Remove door actuator from cargo door fitting and from actuator beam of floor structure (Ref. 52-33-18, P. Block 401).
(7)Close cargo compartment door slowly by means of crane.
(8)Remove cargo door sling (11) from cargo compartment door.
(9)Remove lower hoisting lug (13) and re-install in hoist fitting (14) with eye inwards. Blank off hoisting point with self adhesive patch (15).
(10)Push cargo compartment door to fully closed position by means of man power and push operating handle upwards into the recess until it locks.
(11)Close access panel 811CR (FWD) or 677FR (AFT).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

A. Opening by Means of Electric Hydraulic Pump (Ref. Fig. 006, 008)
(1)Make certain that the aircraft electrical network is energized and that electronics racks ventilation is correct.
(2)Open access panel 811CR (677FR).

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE CARGO COMPARTMENT DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

(3)If the red warning light CABIN PRESSURE flashes, stop any air supply to passenger compartment and wait until warning light goes off.
(4)Depress pushbutton on operating handle and pull operating handle downwards from recess.
(5)Check that all indicator flags are extended.
(6)Open access panel 122CR (677DR).
(7)Turn selector to OPEN position and hold until FWD or AFT cargo compartment door is fully open and the green indicator light comes on.
(8)Release selector. Selector returns to STOP position.

B. Closing by Means of Electric Hydraulic Pump (Ref. Fig. 006, 008)

NOTE : Make certain that the manually operated YZ-latches of the door sill latches are raised (Ref. 52-35-00, P. Block 1).

(1)Make certain that the aircraft electrical network is energized and that electronics racks ventilation is correct.
(2)Turn selector to CLOSE position and hold until the FWD or AFT cargo compartment door is closed. The green indicator light of the service

panel goes off as soon as the cargo compartment door moves in the closing direction.
(3)Release selector. Selector returns to STOP position.
(4)Push operating handle upwards into the recess until it locks.
(5)Check that all indicator flags are retracted and flush with cargo door.
(6)Close access panels 811CR (677FR) and 122CR (677DR).

C. Opening by Means of Hand Pump (Ref. Fig. 010)

NOTE : A second person is required to operate the hand pump.

(1)Open access panel 811CR (677FR).

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE CARGO COMPARTMENT DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

(2)If the red warning light CABIN PRESSURE flashes, stop any air supply to passenger compartment and wait until warning light goes off.
(3)Depress pushbutton on operating handle and pull operating handle downwards from recess.
(4)Check that all indicator flags are extended.
(5)Open access panel 122CR (677DR).
(6)Open main gear main doors (Ref. 32-12-11, P. Block 301).
(7)Set levers of both selector valves 9MJ (FWD) and 10MJ (AFT) located in RH main wheel well to manual operation.
(8)Turn selector to OPEN position and hold.
(9)Operate hand pump located in RH main wheel well until the FWD or AFT cargo compartment door is fully open.
NOTE : A considerable increase in force is felt on the hand pump handle if the door actuator is in its extended, locked position.
(10)Release selector. Selector returns to STOP position.

D. Closing by Means of Hand Pump (Ref. Fig. 010)

NOTE : A second person is required to operate the hand pump.

(1)Make certain that both levers of selector valves 9MJ and 10MJ located in RH main wheel well are in manual operation.
(2)Turn selector to CLOSE position and hold.
(3)Operate hand pump located in RH main wheel well until the FWD or AFT cargo compartment door is closed.
(4)Release selector. Selector returns to STOP position.
(5)Push operating handle upwards into recess until it locks.
(6)Check that all indicator flags are retracted and flush with cargo door.
(7)Set levers of both selector valves 9MJ (FWD) and 10MJ (AFT) located in RH main wheel well to normal position.
(8)Close main gear main doors (Ref. 32-12-11, P. Block 301).
(9)Close access panels 811CR (677FR) and 122CR (677DR).

E. Opening by Means of Crane (Ref. Fig. 011)

NOTE : This procedure must be used in case of hydraulic system failure or in case of a defective door actuator.

(1)Attach cargo door sling PN 98A52307529001 to crane.
(2)Peel off self-adhesive patch (15), remove hoisting lug (13) from lower hoist fitting (14) and re-install hoisting lug (13) with eye outwards.
(3)Open access panel 811CR (FWD) or 677FR (AFT).

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE CARGO COMPARTMENT DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

(4)If the red warning light CABIN PRESSURE flashes, stop any air supply to passenger compartment and wait until warning light goes off.
(5)Depress pushbutton on operating handle and pull operating handle downwards from recess.
(6)If door actuator is still installed, proceed as follows:
(a)Open access panel 122CR (FWD) or 677DR (AFT).
(b)Turn selector to OPEN position and hold.
(7)Attach fastener (12) of cargo door sling (11) to lower hoisting lug (14) and lift cargo compartment door by means of crane to fully open position.
(8)Release selector, if turned. Selector returns to STOP position. Close access panel 122CR (FWD) or 677DR (AFT).
(9)Install support struts PN 98A52307523000 on cargo compartment door.
(10)Replace defective door actuator (Ref. 52-33-18, P. Block 401).

F. Closing by Means of Crane (Ref. Fig. 011)

NOTE : This procedure must be used when the FWD or AFT cargo compartment door is in open position and cannot be closed in case of a defective door actuator or hydraulic system failure.

(1)Attach cargo door sling (11) PN 98A52307529001 to crane.
(2)Peel off self-adhesive patch (15), remove lower hoisting lug (13) from hoist fitting (14) and re-install hoisting lug (13) with eye outwards.
(3)Attach fastener (12) of cargo door sling (11) to lower hoisting lug (14) and use crane until cargo door sling (11) is tight.
(4)Deactivate yellow hydraulic system (Ref. 29-10-00, P. Block 301).

CAUTION : AFTER DISCONNECTION OF HYDRAULIC PIPES FROM FAILED COMPONENT, PRESSURE BLANKS MUST BE INSTALLED TO PIPE ENDS AND COMPONENT CONNECTIONS.

(5)Disconnect hydraulic pipes from defective component and blank off open ends.
(6)Remove door actuator from cargo door fitting and from actuator beam of

floor structure (Ref. 52-33-18, P. Block 401).
(7) Close cargo compartment door slowly by means of crane.
(8) Remove cargo door sling (11) from cargo compartment door.
(9) Remove lower hoisting lug (13) and re-install in hoist fitting (14) with eye inwards. Blank off hoisting point with self adhesive patch (15).
(10) Push cargo compartment door to fully closed position by means of man power and push operating handle upwards into the recess until it locks.
(11) Close access panel 811CR (FWD) or 677FR (AFT).

FWD AND AFT CARGO COMPARTMENT DOORS - SPECIAL PRECAUTIONS

1. General

This procedure must be carried out when the FWD and/or AFT cargo compartment door (referred as to cargo door) remains fully open during the maintenance procedure.
The appropriate safety lock for the particular door actuator must be installed when the door actuator remains connected to the cargo door.
The support struts must be installed before the door actuator is disconnected from the cargo door or from the fuselage structure.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 to 3.0 m (9.0 to 10.0 ft.)
B. 98A52307567001	Safety Lock - FWD and AFT Cargo Compartment Door Actuators (Actuator of Vendor AIR EQUIPMENT only)
	or
C. 98A52307628000	Safety Lock - FWD and AFT Cargo Compartment Door Actuators (Actuator of Vendors FEINMECHANISCHE WERKE MAINZ and AIR EQUIPMENT)
D. 98A52307523000	Support Struts - FWD and AFT Cargo Compartment Doors

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors

**ON A/C 001-003,

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect the aircraft ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Before the FWD or AFT cargo door is to be opened proceed as follows:

WARNING : RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : BEFORE SUPPLYING AIR BY EXTERNAL SOURCE OR APU MAKE CERTAIN THAT:
- AT LEAST ONE FLT COMPT WINDOW OR CABIN DOOR IS OPEN AND REMAINS OPEN DURING SERVICING.
IF THE A/C IS PARKED OUTSIDE AND IS NOT PROTECTED FROM THE RAIN, ONE MAINTENANCE DOOR SUCH AS 134AR, 136AR, OR AVIONICS ACCESS

(5)Fully open FWD or AFT cargo door (Ref. 52-30-00, P. Block 1).

B. Installation of Safety Lock (PN 98A52307567001 or PN 98A52307628000)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect the aircraft ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Before FWD or AFT cargo door is to be opened proceed as follows:

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

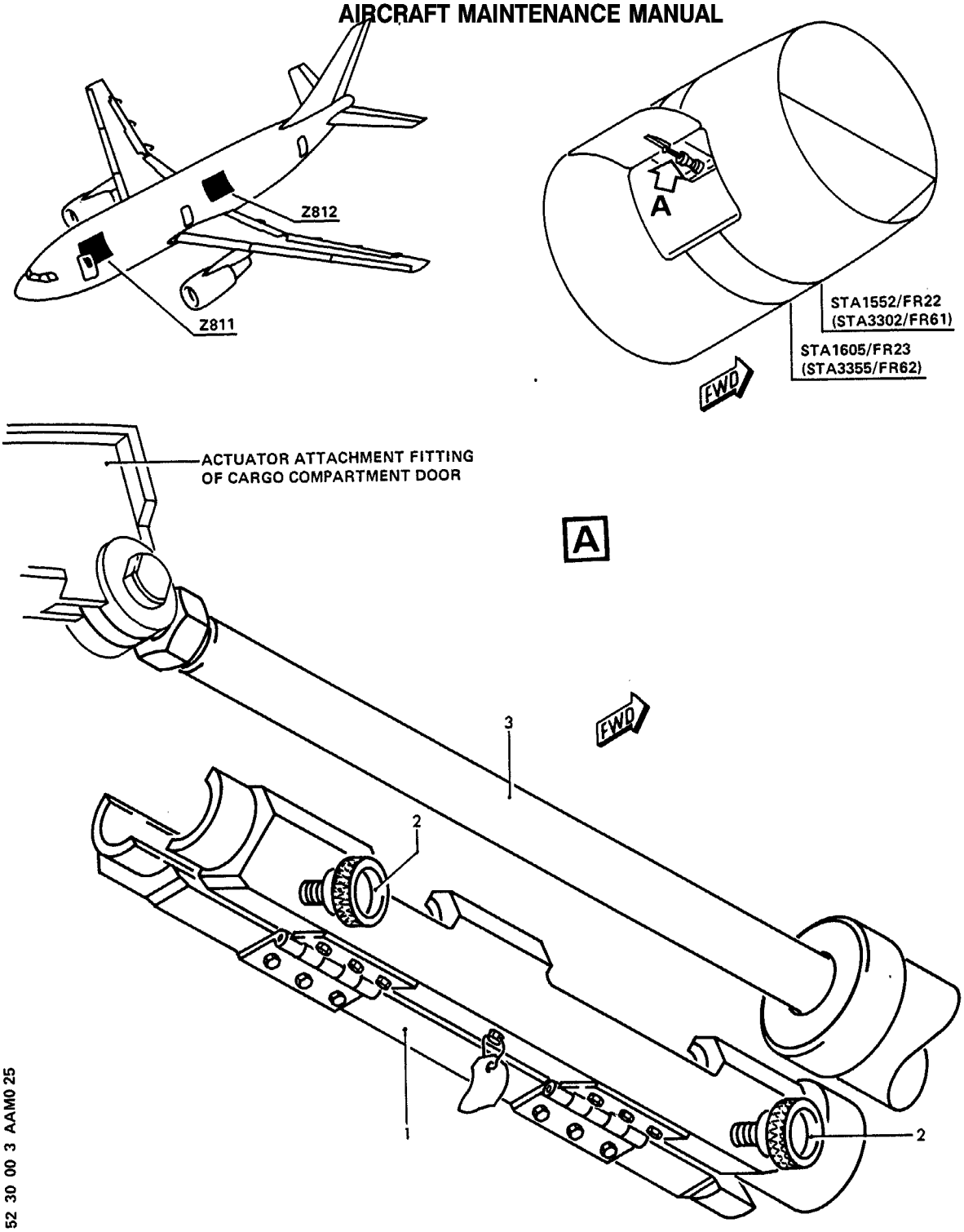
(a)Open the access panel 811CR or 677CR and make sure that red warning light CABIN PRESSURE is not flashed.
(b)If red warning light CABIN PRESSURE is flashing, stop any air supply to passenger compartment and wait until warning light stops flashing before you open door.
(5)Fully open FWD or AFT cargo door (Ref. 52-30-00, P. Block 1).

B. Installation of Safety Lock (PN 98A52307567001 or PN 98A52307628000)

**ON A/C ALL

(Ref. Fig. 301)
NOTE : The safety lock PN 98A52307567001 can only be used on door actuators of vendor AIR EQUIPMENT.
The safety lock PN 98A52307628000 is applicable for door actuators of vendors FEINMECHANISCHE WERKE MAINZ and AIR EQUIPMENT.
(1)Remove knurled bolts (2) and open applicable safety lock (1).
(2)Position safety lock (1) to the piston of door actuator (3) and close safety lock (1).
(3)Install knurled bolts (2) and tighten to secure the safety lock (1).

C. Removal of Safety Lock (PN 98A52307567001 or PN 52307628000)
(1)Make sure that cargo compartment door is fully opened hydraulically (Ref. 52-30-00, P. Block 1).
(2)Remove knurled bolts (2), open safety lock (1) and remove it from piston of door actuator (3).



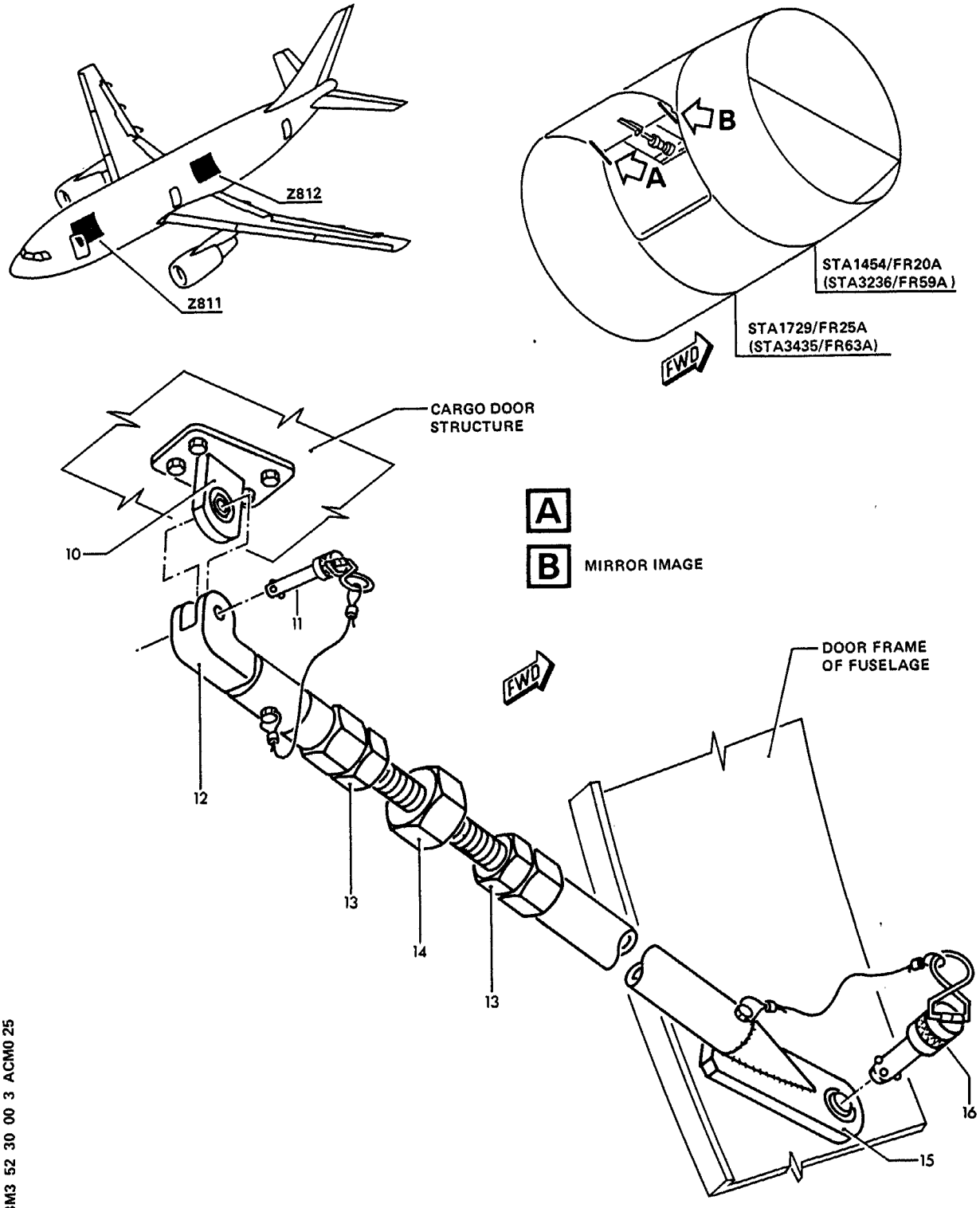
Safety Lock on Door Actuator
Figure 301

(3)Close safety lock (1) and install knurled bolts (2).
(4)Close and lock the cargo compartment door correctly (Ref. 52-30-00, P. Block 1), if necessary.

D. Installation of Support Struts (PN 98A52307523000)
(Ref. Fig. 302)
(1)Position lower end of support strut (15) to the fuselage frame and install the pip pin (16) in attachment hole.
(2)Loosen jam nuts (13) to adjust length of support struts.
(3)Position fork end of support strut (12) to attachment fitting (10).
(4)Turn spindle (14) until holes of fork end (12) and attachment fitting (10) align.
(5)Install pip pin (11) tighten jam nuts (13) to secure connection of support strut and fully opened cargo compartment door.

E. Removal of Support Struts (PN 98A5230752000)
(1)Make sure that cargo compartment door is fully opened hydraulically (Ref. 52-30-00, P. Block 1).
(2)Pull on ring of pip pin (11) and remove it to release connection of support strut and cargo compartment door.
(3)Remove fork end of support strut (12) from attachment fitting (10).
(4)Pull on ring of pip pin (16) and remove it together with support strut (15) from fuselage frame.
(5)If necessary, close and lock cargo compartment door (Ref. 52-30-00, P. Block 1).

F. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(3)Remove access platform.



Support Struts on FWD and/or AFT
Cargo Compartment Doors
Figure 302

CARGO COMPARTMENT DOORS - CLEANING/PAINTING

1. Reason for the Job

Cleaning of FWD and/or AFT cargo compartment door(s) and restoration of damaged paint surfaces.

NOTE : For cleaning the structure or parts of door mechanism use only water-soluble cleaning agents.

NOTE : Observe manufacturer's instructions for use and mixing ratios of cleaning agents.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 to 3.0 m (9 to 10 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Spraying Equipment
D.	Cleaning Rag and Brush
E.	Abrasive Cloth (Alum. Oxide, grade 320)
F.	Synthetic Sponge
G.	Cleaning Cloth
H.	Adhesive Tape
I. Material No. 04-004	Common Greases (Ref. 20-31-00)
J. Material No. 05-027	Special Materials (Ref. 20-31-00)
K. Material No. 11-001	Cleaning Agents (Ref. 20-31-00)
L. Material No. 13-002	Pretreatment for Painting (Ref. 20-31-00)
M. Material No. 16-001	Structure Paints (Ref. 20-31-00)
N. Material No. 16-002	Structure Paints (Ref. 20-31-00)
O. Material No. 16-005	Structure Paints (Ref. 20-31-00)
P. Material No. 16-006	Structure Paints (Ref. 20-31-00)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-30-13, P. Block 401	FWD, AFT Cargo Door Lining and Insulation

3. Procedure

A. Job Set-Up

(1)Position access platform.

(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(3)Make certain that electronics racks ventilation is correct.

(4)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).

(5)Install door actuator safety lock to FWD or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).

(6)Remove door lining and insulation (Ref. 52-30-13, P. Block 401).

(7)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B08

B. Cleaning
(1)Remove loose chips and deposits with synthetic sponge.
(2)Mask moving parts such as bearings with adhesive tape or grease.
(3)Clean door structure and corresponding parts of door mechanism with cleaning agent (Material No. 11-001).
NOTE : Use cleaning agents in accordance with manufacturer's instructions.
(4)Remove foreign objects from recesses and corners using a brush.
(5)Dry the cleaned surfaces with clean cloth or compressed air.

C. Painting
(1)Remove corrosion with abrasive cloth (grade 320) and synthetic sponge.
(2)Clean repaired surfaces with cleaning agent (Material No. 11-001) and dry with clean cloth or compressed air.
(3)Apply protective pretreatment (Material No. 13-002) or wash primer (Material No. 16-005) with clean cloth or brush.
(4)After a reaction time of two minutes, carefully rinse with cold water and dry immediately.
(5)Apply polyurethane primer (Material No. 16-001), primer epoxy strontium chromate (Material No. 16-006) and polyurethane grey top coat (Material No. 16-002). (For special procedure refer to 51-12-00, P. Block 801 and manufacturer's instructions).

D. Close-Up
(1)Remove adhesive tape or grease.
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(4)Install door lining and insulation (Ref. 52-30-13, P. Block 401).
(5)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(6)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(7)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(8)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(9)Remove access platform.

CARGO COMPARTMENT DOORS - DEACTIVATION/REACTIVATION

REF : MMEL Sect 1-52, Item 4

WARNING : CHECK THAT THE LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
WARNING : BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
WARNING : BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.
CAUTION : THIS PROCEDURE IS TO BE USED ACCORDING TO THE REQUIREMENTS OF THE MEL.

1. Deactivation

A. Reason for the Job

To make certain that Yellow Hydraulic System is satisfactory if one or all door actuator(s) is (are) inoperative.
NOTE : The corresponding cargo compartment door must be manually closed and locked.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.0 m (8 ft. 8 in.).
(2)	Warning Notice

Referenced Procedures

- 12-12-29, P. Block 1	Hydraulics
- 24-41-00, P. Block 301	AC External Power Control
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)
- 52-30-00, P. Block 1	Cargo Compartment Doors

C. Procedure

(1) Job Set-Up

(a) Open main gear main door (Ref. 32-12-11, P. Block 301) to get access to hydraulic compartment.
(b) Position access platform to get access to access panels.
(c) Open access door 147AL to get access to Green hydraulic ground service panel.
(d) Open access panel 811CR (677FR) to get access to operating handle of FWD (AFT) cargo compartment door.
(e) Open access panel 122CR (677CR) to get access to service panel of FWD (AFT) cargo compartment door.
(f) Display warning notice in the flight compartment on overhead panel 427VU to prohibit operation of Yellow hydraulic system.

(g)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(h)Make certain that electronics racks ventilation is correct.
(i)Make certain that FWD and/or AFT cargo compartment doors are manually closed and locked (Ref. 52-30-00, P. Block 1).

(2)Preparation for Test
(a)Depressurize Yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(b)Check fluid level of Yellow hydraulic reservoir (Ref. 12-12-29, P. Block 1). If necessary, fill up Yellow hydraulic reservoir.
(c)Make certain that pressure of Yellow hydraulic reservoir is correct (Ref. 29-14-00, P. Block 301).

(3)Test
(a)Pressurize Yellow auxiliary hydraulic system (Ref. 29-24-00, P. Block 301).
(b)Check over a period of five minutes that there is no pressure drop in system.
(c)Check the hydraulic system of FWD (AFT) cargo compartment door as follows:
1 Press pushbutton on operating handle and pull it down from recess to unlock the cargo door.
2 Turn selector on service panel to "CLOSE" position and hold for 3 seconds.
3 Make certain that there is no leakage at door actuator, pipes and associated valves.
NOTE : If necessary, disconnect hydraulic pipes from failed components and fit pressure blanks to the pipe ends and component connections.
4 Push operating handle upwards into its recess to lock the cargo door again.
5 Make certain that FWD (AFT) cargo compartment door is correctly closed and locked (Ref. 52-30-00, P. Block 1).

D. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Make sure that access door 147AL and access panels 122CR (677DR) and 811CR (677FR) are closed.
(3)Remove access platform.
(4)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(5)Remove warning notice from flight compartment.
(6)Install a temporary placard in the flight compartment to warn the flight crew that door actuator (or other components) of FWD and/or AFT cargo compartment door is deactivated.
(7)Make an entry in the aircraft technical log.

2. Reactivation

A. Referenced Procedures
- 52-33-18, P. Block 401 Door Actuator

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 to 3.0 m (8.8 to 9 ft.)
B.	Circuit Breaker Safety Clips and Tags
C. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors

2. Procedure

**ON A/C ALL

R

(Ref. Fig. 401)

**ON A/C ALL

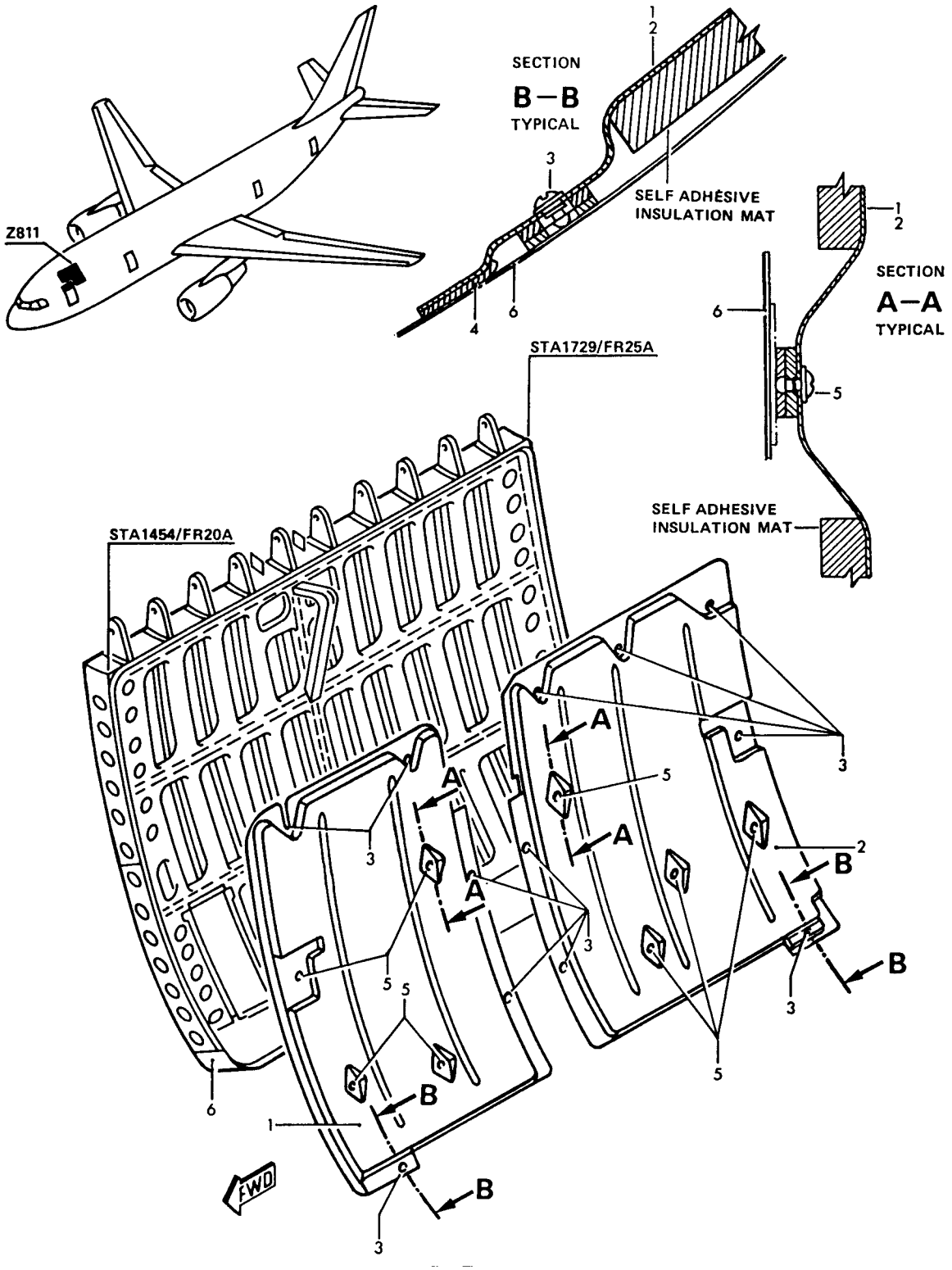
R

(Ref. Fig. 402)

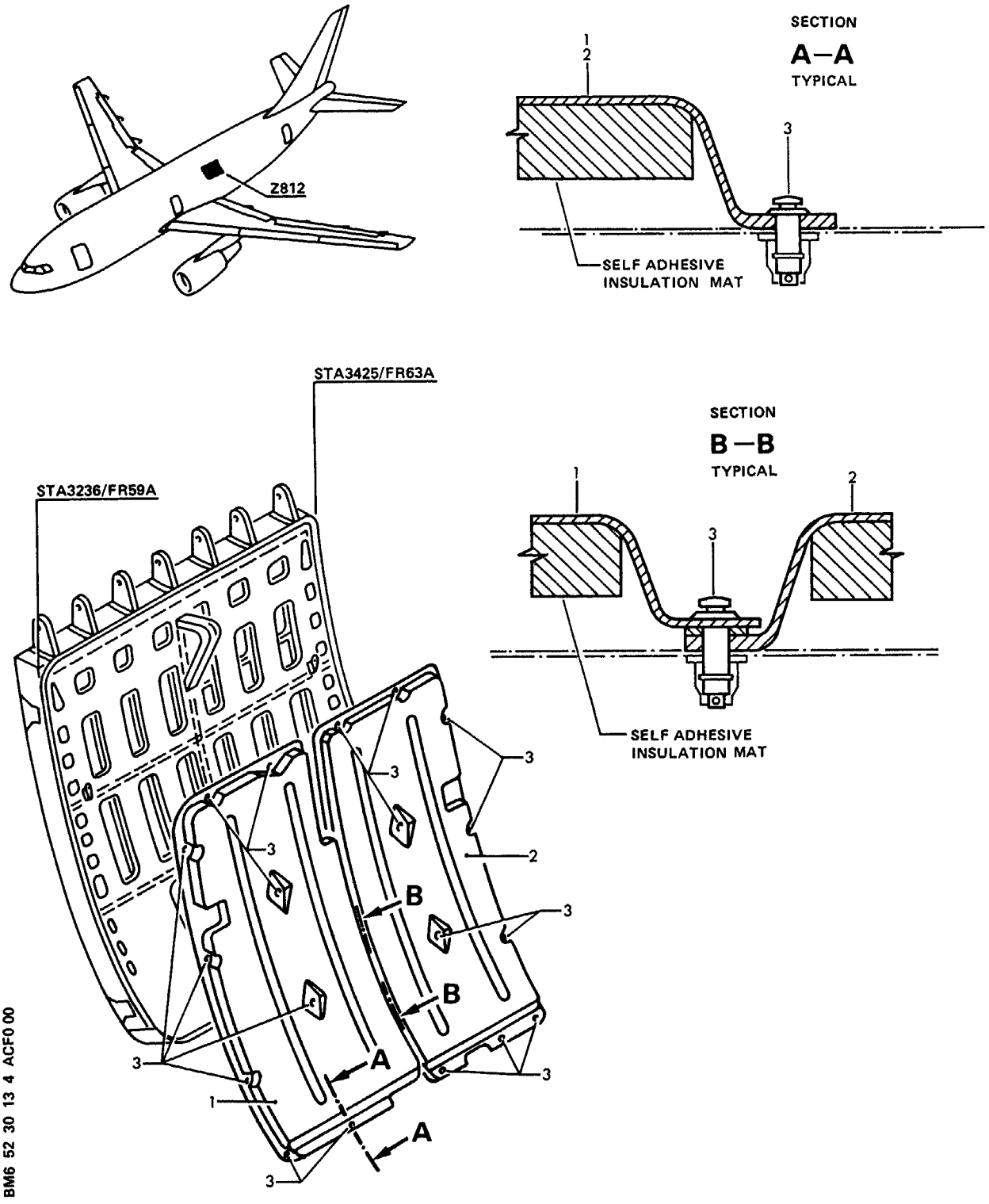
**ON A/C ALL

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)Install door actuator safety lock to FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).
(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B7



FWD Cargo Compartment Door Lining and Insulation
Figure 401



AFT Cargo Compartment Door Lining and Insulation
Figure 402

**ON A/C ALL

R

B. Removal
(1)FWD Cargo Compartment Door
(a)Unlock quick-release fasteners (3) and (5) to disconnect the left and right fire protection linings (1) and (2) from the cargo door structure (6).
(b)Carefully disengage the VELCRO tapes (4) and remove the left fire protection lining (1) together with the self-adhesive insulation mat from the cargo door structure (6).
(c)Carefully disengage the VELCRO tapes (4) and remove the right fire protection lining (2) together with the self-adhesive insulation mat from the cargo door structure (6).

**ON A/C ALL

R

(2)AFT Cargo Compartment Door
(a)Unlock the quick-release fasteners (3) to disconnect the left and right fire protection linings (1),(2) from the cargo door structure.
(b)Carefully disengage the VELCRO tapes and remove the left fire protection lining (1) together with the self-adhesive insulation mat from the cargo door structure.
(c)Carefully disengage the VELCRO tapes and remove the right fire protection lining (2) together with the self-adhesive insulation mat from the cargo door structure.

**ON A/C ALL

R

C. Installation
(1)FWD Cargo Compartment Door
(a)Make certain that area between door structure and the fire protection linings (1),(2) is clean and clear of tools and miscellaneous items of equipment.
(b)Position the right fire protection lining (2) together with the self-adhesive insulation mat on the cargo door structure (6) so that the VELCRO tapes (4) engage.
(c)Position the left fire protection lining (1) together with the self-adhesive insulation mat on the cargo door structure (6) so that the VELCRO tapes (4) engage.

(d)Lock the quick-release fasteners (3) and (5) to secure the left and right fire protection linings (1) and (2) on the cargo door structure (6).

**ON A/C ALL

R

(2)AFT Cargo Compartment Door
(a)Make sure that the area between the cargo door structure and the fire protection linings (1),(2) is clean and clear of tools and miscellaneous items of equipment.
(b)Position the right fire protection lining (2) together with the self-adhesive insulation mat on the cargo door structure so that the VELCRO tapes engage.
(c)Position the left fire protection lining (1) together with the self-adhesive insulation mat on the cargo door structure so that the VELCRO tapes engage.
(d)Lock the quick-release fasteners (3) to secure the left and right fire protection linings (1),(2) on the cargo door structure.

**ON A/C ALL

D. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(3)Remove door actuator safety lock (Ref. 52-30-00, P. Block 301).
(4)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(6)Remove access platform.

NOTE : Data related to removal/installation of BULK Cargo Compartment Door is incorporated in chapter 52-34-18, P. Block 401.

1. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 2.7 to 3.0 m (8.8 to 9 ft.)
	B.	Circuit Breaker Safety Clips and Tags
	C.	Wooden Scraper
	D.	Talcum Powder, pure
R	E. Material No. 04-004	Common Greases (Ref. 20-31-00)
R	F. Material No. 05-001	Special Materials (Ref. 20-31-00)
R	G. Material No. 05-027	Special Materials (Ref. 20-31-00)
R	H. Material No. 09-016	Sealants (Ref. 20-31-00)
R	J. Material No. 11-001	Cleaning Agents (Ref. 20-31-00)
R	K. Material No. 16-003	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 51-74-10, P. Block 801	Removal of Corrosion
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-33-18, P. Block 401	Door Actuator

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)Install support struts on FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 301).
(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B5

B. Removal
(1)Secure door actuator against dropping to prevent damage to hydraulic pipes or hoses.
(2)Disconnect door actuator from actuator fitting of FWD and/or AFT cargo compartment door(s) (Ref. 52-33-18, P. Block 401).

** ON FWD CARGO COMPARTMENT DOOR

(Ref. Fig. 401)
(3)Remove bolts (8) and washers (7).
(4)Remove retainers (2),(3),(4),(5),(6),(9),(10),(11).
(5)Remove door seal (1).

** ON AFT CARGO COMPARTMENT DOOR

(Ref. Fig. 402)
(3)Remove bolts (8) and washers (7).
(4)Remove retainers (2),(3),(4),(5),(6),(9),(10),(11),(15),(16).
(5)Remove door seal (1).

C. Preparation of Replacement Component
(1)Remove old sealant from all retainers and the door inner skin with wooden scraper and cleaning agent (Material No. 11-001).
(2)Check all retainers for corrosion (Ref. 51-74-10, P. Block 801).
(3)Clean door seal contact area of FWD or AFT cargo compartment door with cleaning agent (Material No. 11-001).
(4)Spray protective film (Material No. 05-027) on door inner skin of seal contact area.

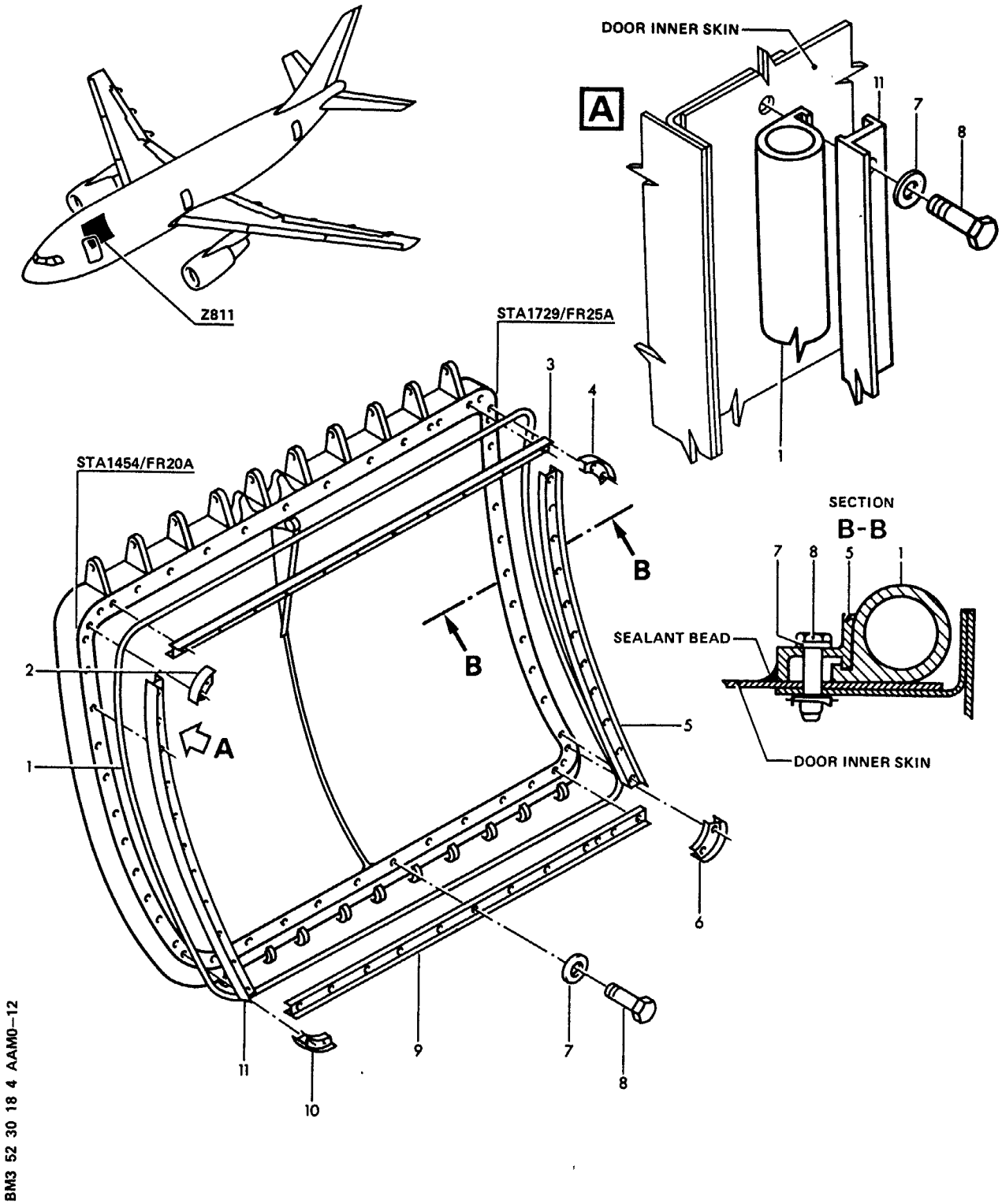
D. Installation

** ON FWD CARGO COMPARTMENT DOOR

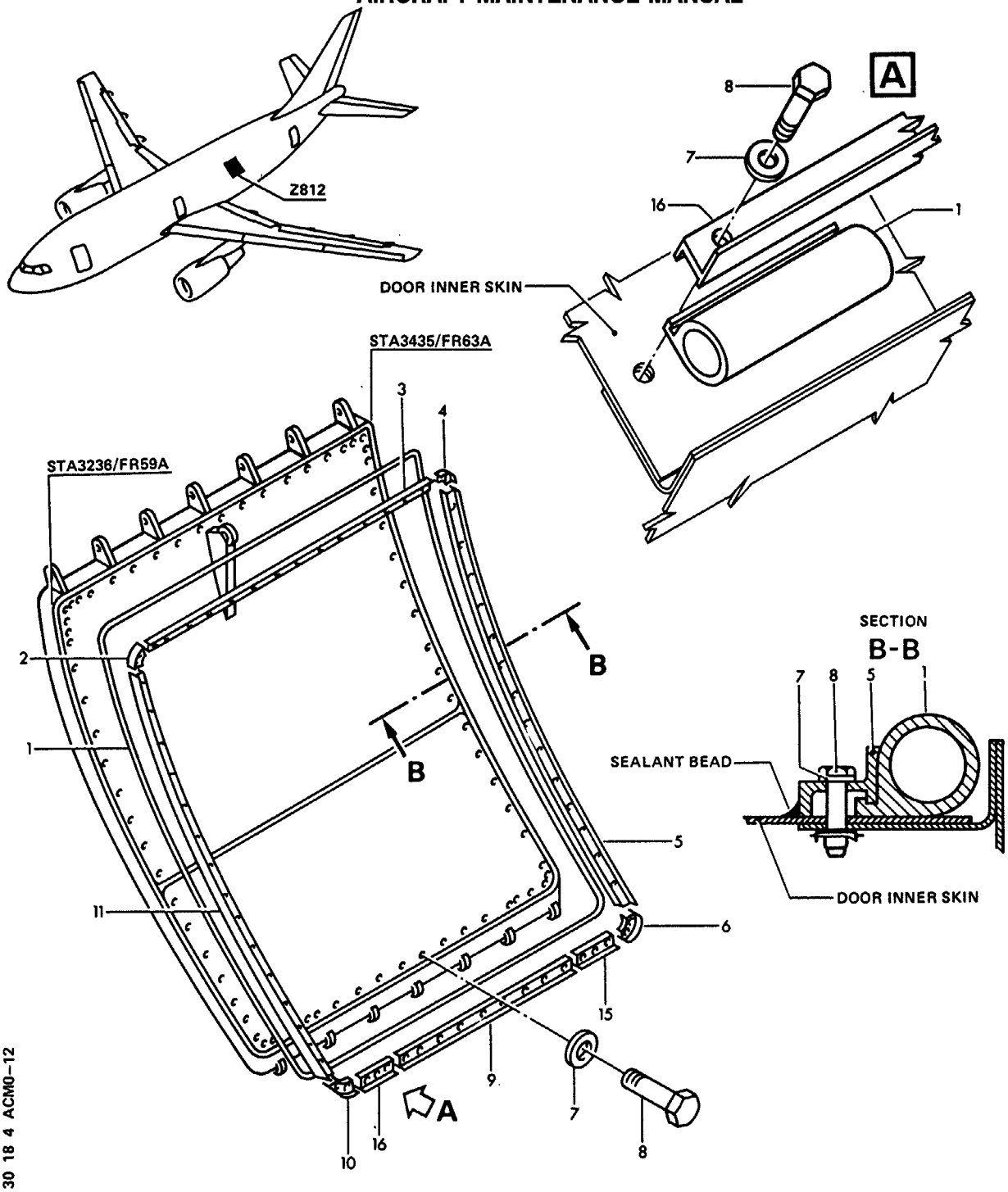
(1)Position door seal (1) on cargo compartment door.
(2)Coat all bolts (8) with grease (Material No. 04-004).
(3)Install retainers (2),(3),(4),(5),(6),(9),(10) and (11) with washers (7) and bolts (8).
(4)TORQUE bolts (8) to between 0.17 and 0.20 m.daN (15.05 and 17.70 lbs.in.) and remove extruded grease (Material No. 04-004).
(5)Fill up all junctions and spaces between all retainers with sealant (Material No. 09-016).
(6)Provide corner between seal retainers and inner skin of door area with sealant bead (Material No. 09-016).
(7)Allow sealant bead to dry and protect with polyamide lacquer (Material No. 16-003).
(8)Protect door seal (1) with pure talcum powder.

** ON AFT CARGO COMPARTMENT DOOR

(1)Position door seal (1) on cargo compartment door.
(2)Coat all bolts (8) with grease (Material No. 04-004).
(3)Install retainers (2),(3),(4),(5),(6),(15),(9),(16),(10) and (11) with washers (7) and bolts (8).
(4)TORQUE bolts (8) to between 0.17 and 0.20 m.daN (15.05 and 17.70 lbs.in.) and remove extruded grease (Material No. 04-004).
(5)Fill up all junctions and spaces between all retainers with sealant (Material No. 09-016).



FWD Cargo Compartment Door Seal
Figure 401



AFT Cargo Compartment Door Seal
Figure 402

(6)Provide corner between seal retainers and inner skin of door area with sealant bead (Material No. 09-016).
(7)Allow sealant bead to dry and protect with polyamide lacquer (Material No. 16-003).
(8)Protect door seal with pure talcum powder.

** ON FWD AND AFT CARGO COMPARTMENT DOORS

(9)Install door actuator on actuator fitting of cargo door structure (Ref. 52-33-18, P. Block 401).
(10)Remove the support struts (Ref. 52-30-00, P. Block 301).

E. Test
(1)Check installation position of door seal around the FWD or AFT cargo compartment door.

F. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
R (3)To avoid sticking or freezing of door seal to structure protect the
R door seal with special sealing (Material No. 05-001).
R (4)Make certain that water drain holes are clean and free from obstructions.
R (5)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
R (6)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
R (7)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
R (8)Remove access platform.

FWD, AFT CARGO DOOR SEAL - APPROVED REPAIRS

WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS AND A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT. AVOID INHALING FUMES.

1. Reason for the Job

A. Repair of:

NOTE : Item numbers correspond with operations in 3.B.

(1)Chafe marks.
(2)Cuts up to a depth of one third of seal wall thickness.
(3)Cuts exceeding a depth of one third of seal wall thickness.
(4)Heavily damaged areas by replacement of sections.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 to 3.0 m (8.8 to 9.0 ft.)
B.	Lint-free Cloth
C.	Sharp Knife and Scissors
D.	Medium-Sized Spatula
E.	Emery Cloth
F.	C-Clamp
G.	Wooden Bonding Block
H. Material No. 05-023	Special Materials (Ref. 20-31-00)
I. Material No. 05-024	Special Materials (Ref. 20-31-00)
J. Material No. 08-004	Bonding and Adhesive Compounds (Ref. 20-31-00)
K. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
Referenced Procedures	
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 1	FWD and AFT Cargo Compartment Doors
- 52-30-18, P. Block 401	FWD, AFT Cargo Door Seal

3. Procedure

A. Job Set-Up

(1)Position access platform.
(2)Open the FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(3)Install support struts on FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 301).
(4)Remove door seal from FWD or AFT cargo compartment door (Ref. 52-30-18, P. Block 401).

B. Approved Repairs
(Ref. Fig. 801)
(Ref. Fig. 802) (Sheet 1/3)
(Ref. Fig. 802) (Sheet 2/3)
(Ref. Fig. 802) (Sheet 3/3)

(1)Repair of chafe marks.

NOTE : If chafe marks are in contact area of door seal, replace this section of door seal (refer para 3.B.(3)).

(a)Slightly abrade chafe mark using emery cloth.

WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS.

(b)Carefully degrease chafe mark with cleaning agent (Material No. 11-004) and a lint-free cloth.

(c)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to chafe mark and smooth with a spatula.

(d)Protect treated chafe mark against dust and allow bonding and adhesive compound (Material No. 08-004) to dry for 10 to 12 hours.

(2)Repair of cuts up to 25.4 mm (1.0 in.) in length and not in contact area of door seal.

NOTE : If cuts are in contact area of door seal, replace this section of door seal (refer para. 3.B.(3)).

(a)Drill stop holes of dia. 2.0 mm (0.08 in.) at ends of cut.

(b)Open cut by applying pressure to seal and slightly abrade faces of cut using emery cloth.

** ON DOOR SEAL OF FWD CARGO COMPARTMENT DOOR

(c)Carefully remove the first layer of tissue reinforcement from door seal in area of 10 mm (0.40 in.) around cut (repair area).

** ON DOOR SEAL OF AFT CARGO COMPARTMENT DOOR

(d)Carefully abrade surface of door seal in area of 10.0 mm (0.40 in.) around cut to a depth of 0.5 mm (0.02 in.) (repair area).

** ON DOOR SEAL OF FWD AND AFT CARGO COMPARTMENT DOORS

(e)Prepare surface of repair area with emery cloth.

WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS.

(f)Carefully degrease repair area with cleaning agent (Material No. 11-004) and a lint-free cloth.

(g)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to faces of cut.

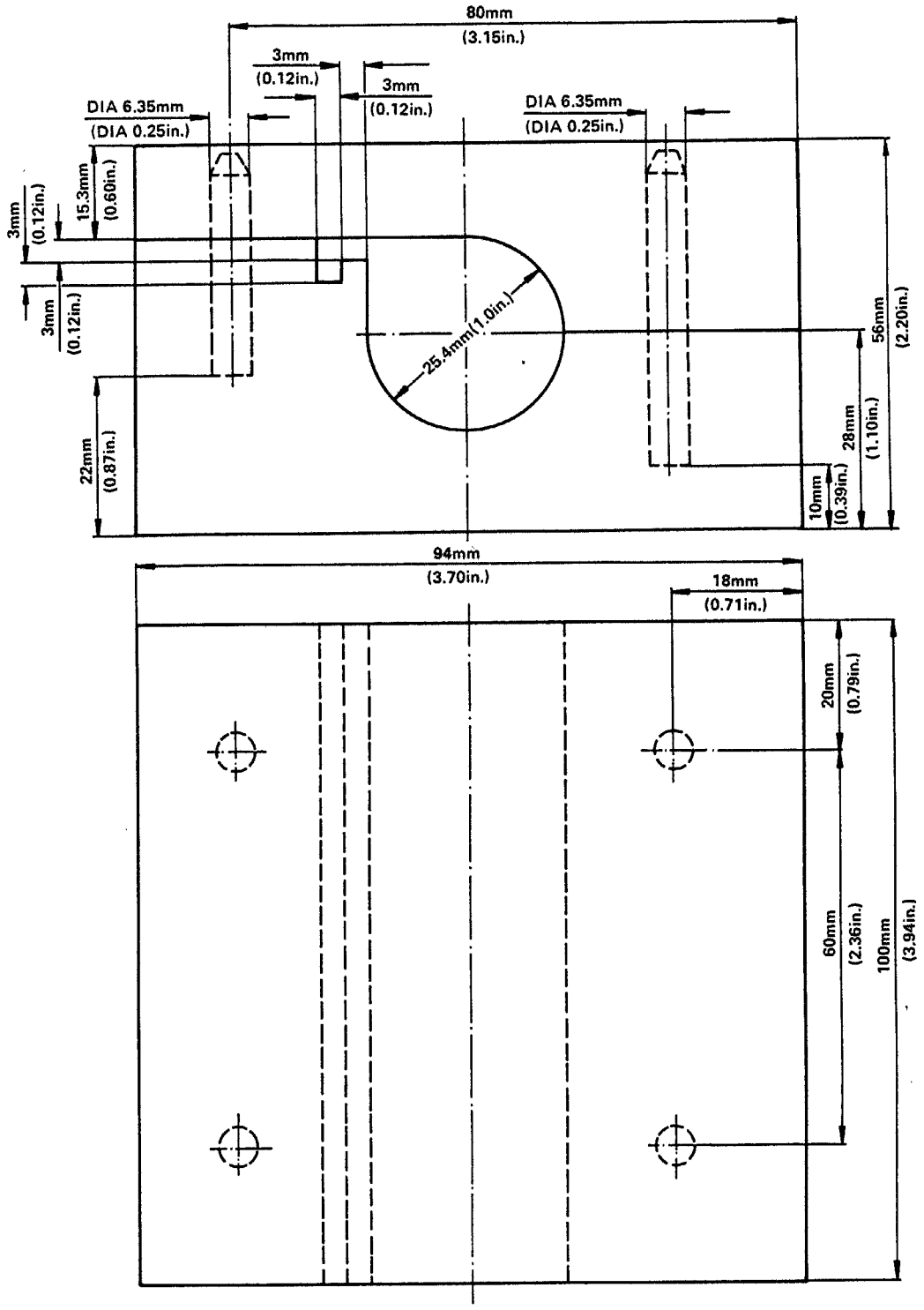
(h)Press faces of cut together as far as possible and allow them to dry for some minutes.

(i)Cut a piece of tissue (Material No. 05-024) to a size necessary to insert it in repair area.

(j)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to repair area and fill stop holes.

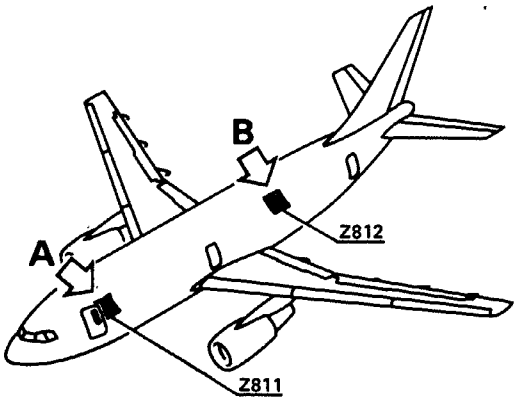
(k)Position piece of tissue (Material No. 05-024) in repair area.

(l)Cover repair area with a layer of foil (Material No. 05-023), and position door seal in wooden bonding block.



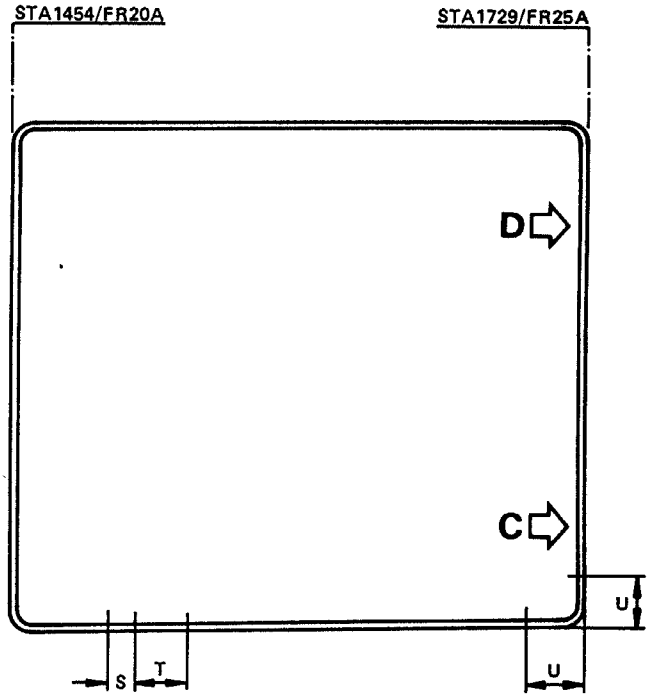
BM3 52 30 18 8 AAM0 25

Wooden Bonding Block
Figure 801



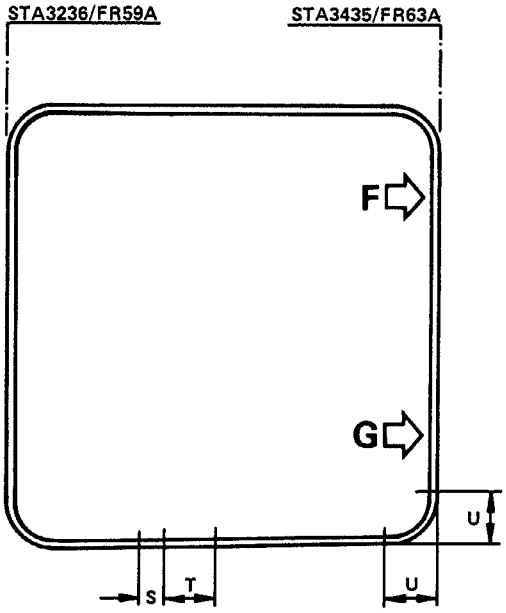
A

DOOR SEAL OF FWD CARGO COMPARTMENT DOOR



B

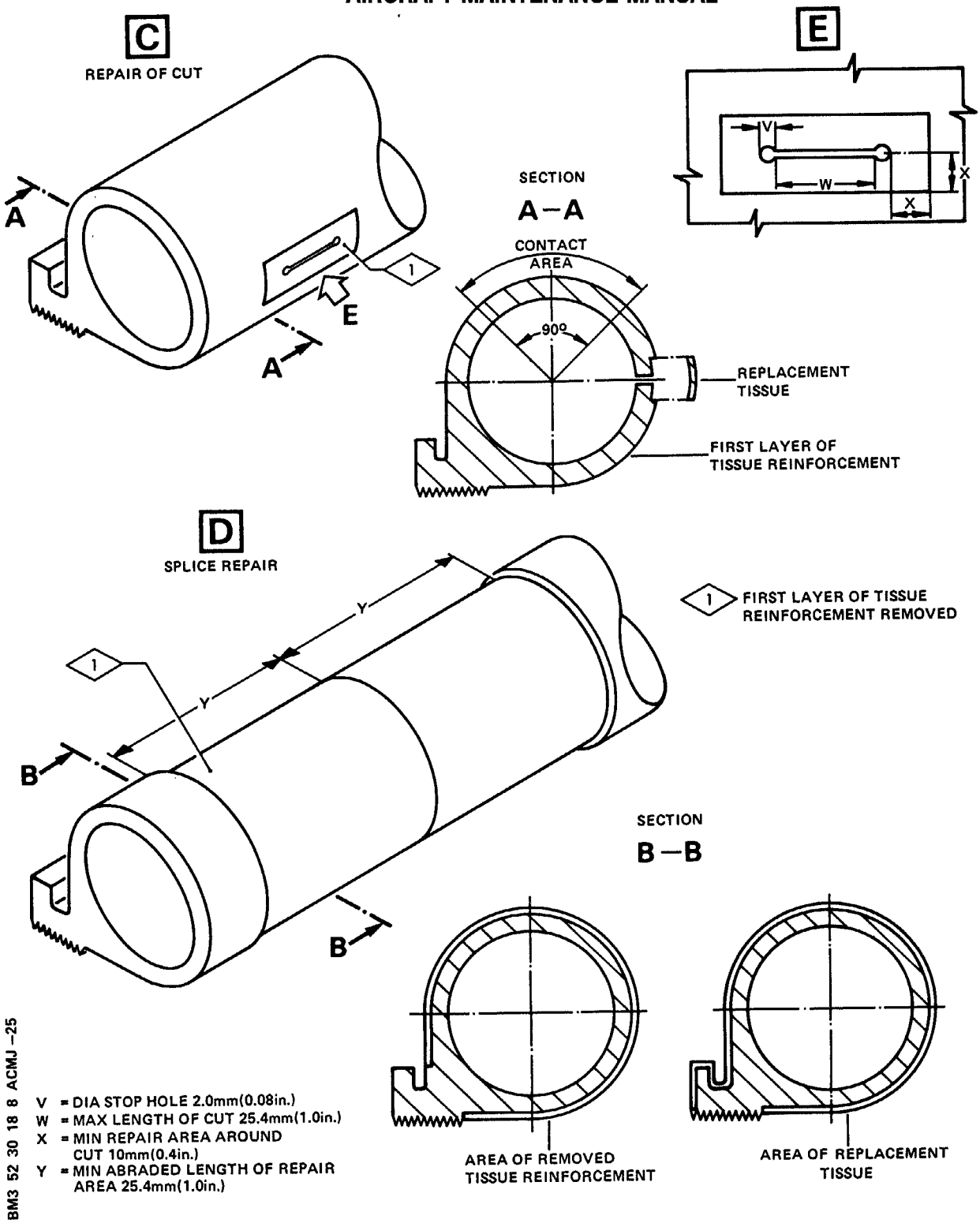
DOOR SEAL OF AFT CARGO COMPARTMENT DOOR



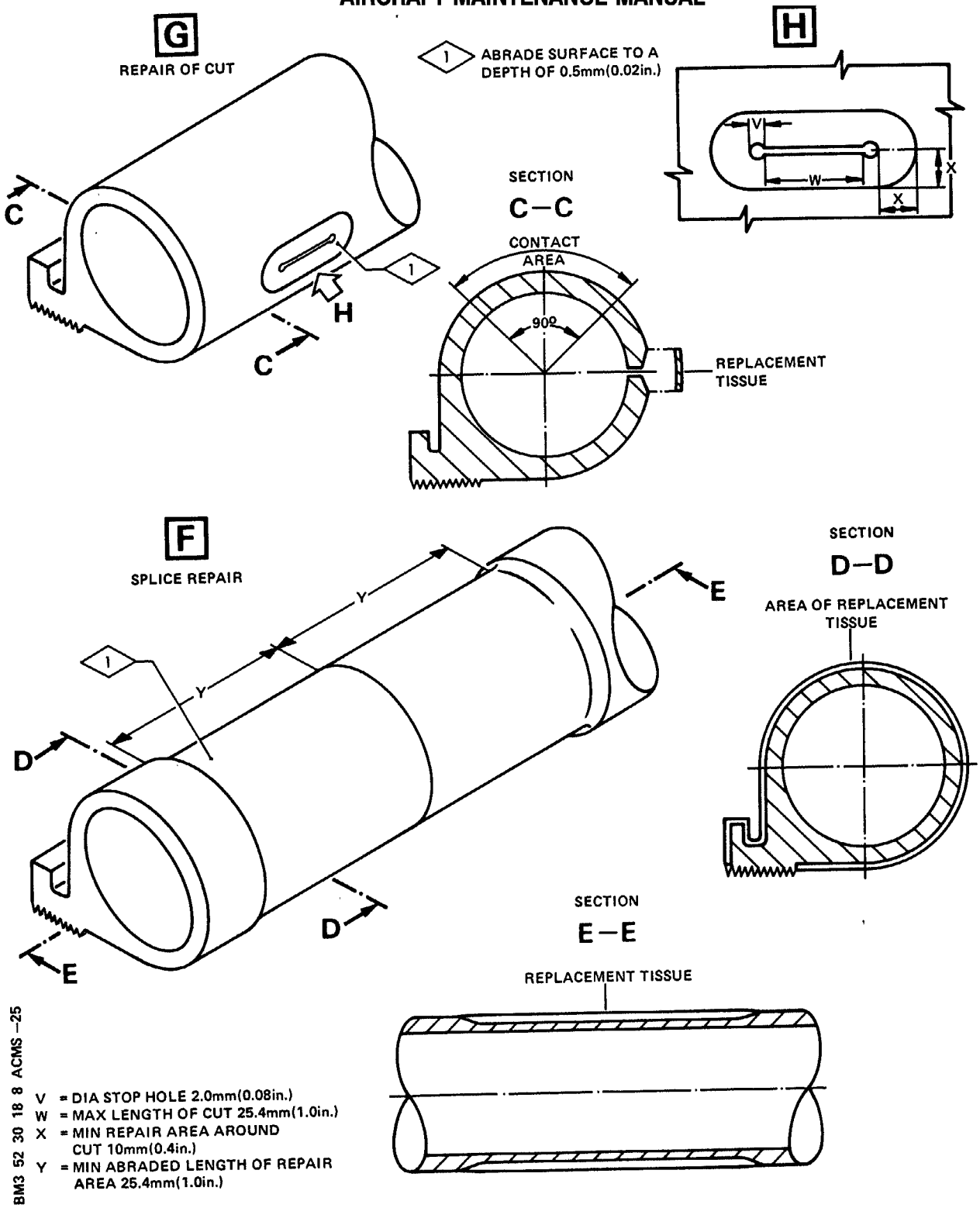
S = MIN DISTANCE OF 50mm(1.97in.) FROM INFLATION HOLE
T = MIN REPAIR LENGTH OF 200mm(7.87in.)
U = MIN REPAIR LENGTH OF 200mm(7.87in.) FOR RADII

BM3 52 30 18 8 ACMA -25

Repair Damaged Door Seal (Sheet 1/3)
Figure 802



Repair Damaged Door Seal (Sheet 2/3)
Figure 802



Repair Damaged Door Seal (Sheet 3/3)
Figure 802

(m)Compress door seal in wooden bonding block using C-clamp.
(n)Allow bonding and adhesive compound (Material No. 08-004) to dry for 24 hours.
(o)Remove bonding block and foil from repaired door seal.
(p)Remove excessive adhesive compound using emery cloth to get a smooth surface of door seal.

(3)Repair of chafe marks and cuts exceeding 25.4 mm (1.0 in.) in length or in contact area by replacement of section.
(a)Cut door seal at a min. distance of 50.0 mm (1.97 in.) from next inflation hole to remove damaged section of door seal.
NOTE : The min. repair length of replacement section is:
- for straight section, 200.0 mm (7.87 in.),
- for curve section, 200.0 mm (7.87 in.), measured from edge corner.

(b)For curved sections, cut and remove damage seal to same length as replacement section.
(c)For straight sections, cut a section of replacement door seal to same length as removed section.
NOTE : Make certain that quantity of inflation holes are the same as in the removed section.

** ON DOOR SEAL OF FWD CARGO COMPARTMENT DOOR

(d)Carefully remove the first layer of tissue reinforcement from ends of door seal and replacement section over a length of 25.4 mm (1.0 in.) (repair area).
(e)Slightly abrade faces of door seal and replacement section with emery cloth.

** ON DOOR SEAL OF AFT CARGO COMPARTMENT DOOR

(d)Carefully abrade end surface of door seal ends and replacement section over a length of 25.4 mm (1.0 in.) to a depth of 0.5 mm (0.02 in.) (repair area).
(e)Prepare surface of repair area with emery cloth.

** ON DOOR SEAL OF FWD AND AFT CARGO COMPARTMENT DOORS

WARNING : CLEANING AGENT (MATERIAL NO. 11-004) IS DANGEROUS.
(f)Carefully degrease faces of door seal and replacement section with cleaning agent (Material No. 11-004) and a lint-free cloth.
(g)Apply a thin coat of bonding and adhesive compound (Material No. 08-004) to faces of cuts.
(h)Insert replacement section in door seal, press the ends together and allow them to dry for some minutes.
(i)Cut tissue (Material No. 05-024) to size of repair area.
(j)Apply a coat of adhesive compound (Material No. 08-004) to mating surface of tissue and seal.
(k)Position tissue (Material No. 05-024) around the repair area.
(l)Cover repair area with a layer of foil (Material No. 05-023) and position door seal in wooden bonding block.

(m)Compress seal in wooden bonding block using C-clamp.
(n)Allow bonding and adhesive compound (Material No. 08-004) to dry for 24 hours.
(o)Remove bonding block and foil from repaired door seal.
(p)Remove excessive adhesive compound using emery cloth to get a smooth surface of door seal.

C. Close-Up

R (1)Install the repaired door seal on the applicable cargo door (Ref. 52-30-18, P. Block 401).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
R (3)Remove the applicable safety support equipment from the cargo door
R (Ref. 52-30-00, P. Block 301).
R (4)Close the applicable cargo door (Ref. 52-30-00, P. Block 201).
(5)Remove access platform.

FWD, AFT CARGO DOOR LOCKING MECHANISM - REMOVAL/INSTALLATION

NOTE : For removal/installation procedures of bulk cargo compartment door refer to chapter 52-34-21, P. Block 401.

1. Reason for the Job

A. Removal for replacement of
NOTE : Item numbers correspond with operations in 3.B. and 3.D.
(1)Locking Unit
(2)Indicator Flag without Locking Unit
(3)Torque Shaft Assy
(a)Torque Tube Including Flexible Disk
(b)Flanged Bearing
(c)Control Shaft
(4)Operating Handle
(5)Latching Mechanism of Operating Handle
(6)Switch Actuating Assembly
(7)Switch Mechanism

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.5 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Torque Wrench, 0 to 1.0 m.daN (88.5 lbf.in.)
D.	Weight 5 daN (11.25 lbf.)
E.	Taper Lock Bolts
F.	Cotter Pins
G.	Lockwire, Corrosion-Resistant Steel, Dia. 0.8 mm (0.032 in.)
H.	Tab Washers
I. Material No. 04-004	Common Greases (Ref. 20-31-00)
J. Material No. 05-002	Special Materials (Ref. 20-31-00)
K. Material No. 05-027	Special Materials (Ref. 20-31-00)
L. Material No. 08-002	Bonding and Adhesive Compounds (Ref. 20-31-00)
M. Material No. 09-013	Sealants (Ref. 20-31-00)
N. Material No. 16-001	Structure Paints (Ref. 20-31-00)
O. Material No. 16-002	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-35-13, P. Block 401	Door Locking Control Switch
- 52-35-13, P. Block 501	Door Locking Control Switch
- 52-71-11, P. Block 401	Door Warning Switches
- 52-71-11, P. Block 501	Door Warning Switches

3. Procedure

A. Job Set-Up

NOTE : Designations in brackets refer to AFT cargo compartment door.

(1)Position access platform.

(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(3)Make certain that electronics racks ventilation is correct.

(4)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).

(5)Install door actuator safety lock to FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).

(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B7

(7)Remove access covers 811DR and 811ER (812DR and 812ER) in area of operating handle.

(8)Remove access covers 811AR and 811BR (812AR and 812BR) to get access to components of locking mechanism.

B. Removal

(1)Locking Unit (20) Including Spring Unit (21)
(Ref. Fig. 401)
(Ref. Fig. 402)

(a)Remove lockwire and then remove bolts (13), washers (14) and lock plate (15). Withdraw pin (16) from indicator flag (31).

(b)Remove rubber stop (12) by removing screws (10), washers (11) and rivet nut ledges (32),(33).

(c)Remove cotter pin (5), castle nut (4), washer (3), tab washer (2) and bolt (1) from bellcrank (24).

(d)Remove cotter pin (9), castle nut (8), washer (7) and bolt (6) from locking hook (25).

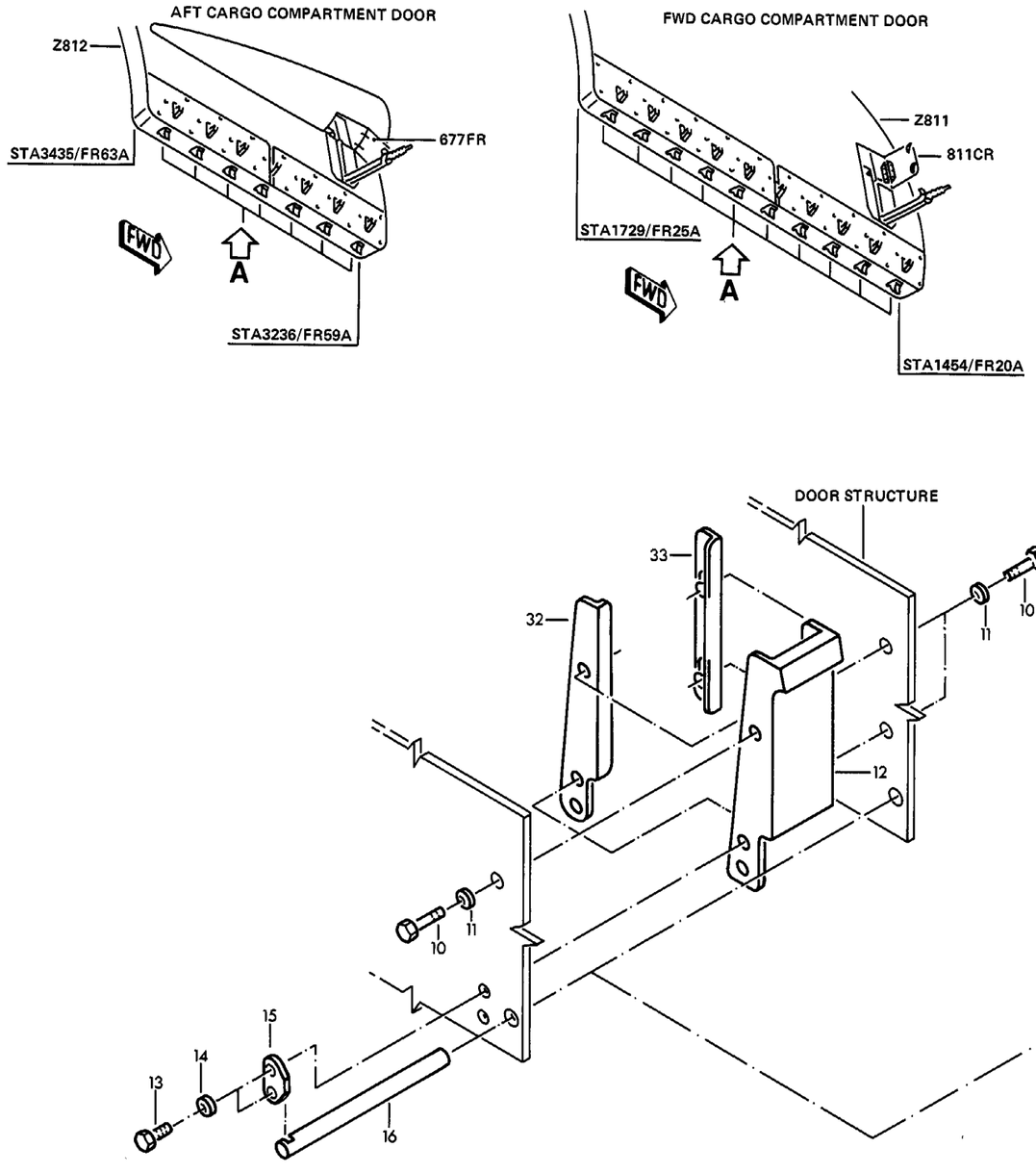
(e)Remove nuts (41) and taper lock bolts (42) connected to torque shaft lever (17) and flanged bearings (43),(56).

(f)Remove circlip (19) from pin (18).

(g)Rotate torque shaft lever (17) until pin (18) is accessible through the mounting hole.

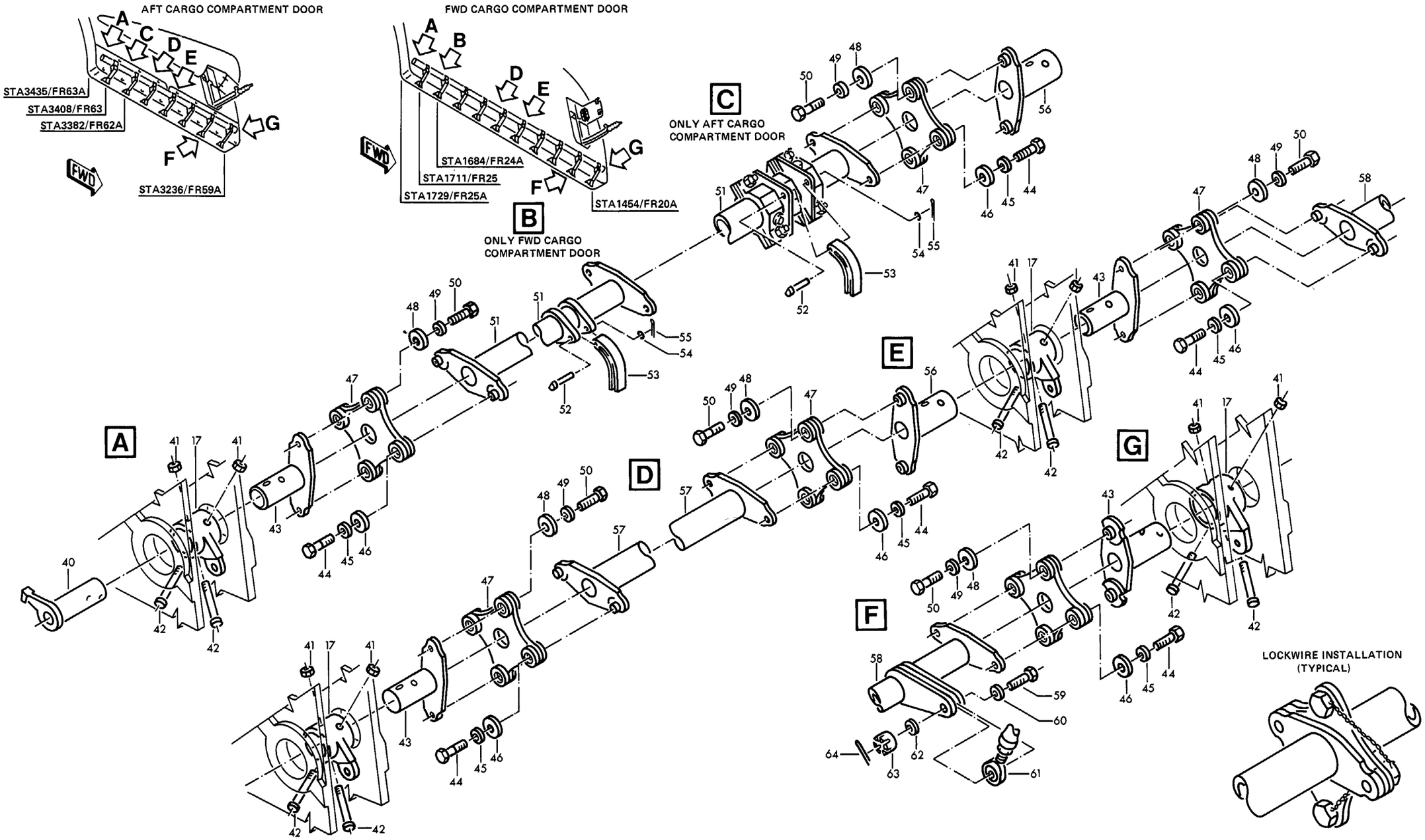
(h)Support locking unit (20) and remove pin (18) from torque shaft lever (17) and spring unit (21) and withdraw locking unit (20) from cargo compartment door.

(i)If necessary, remove spring unit (21) from locking unit (20) by removing circlip (23) and pin (22).



BM3 52 30 21 4 AAM0-13

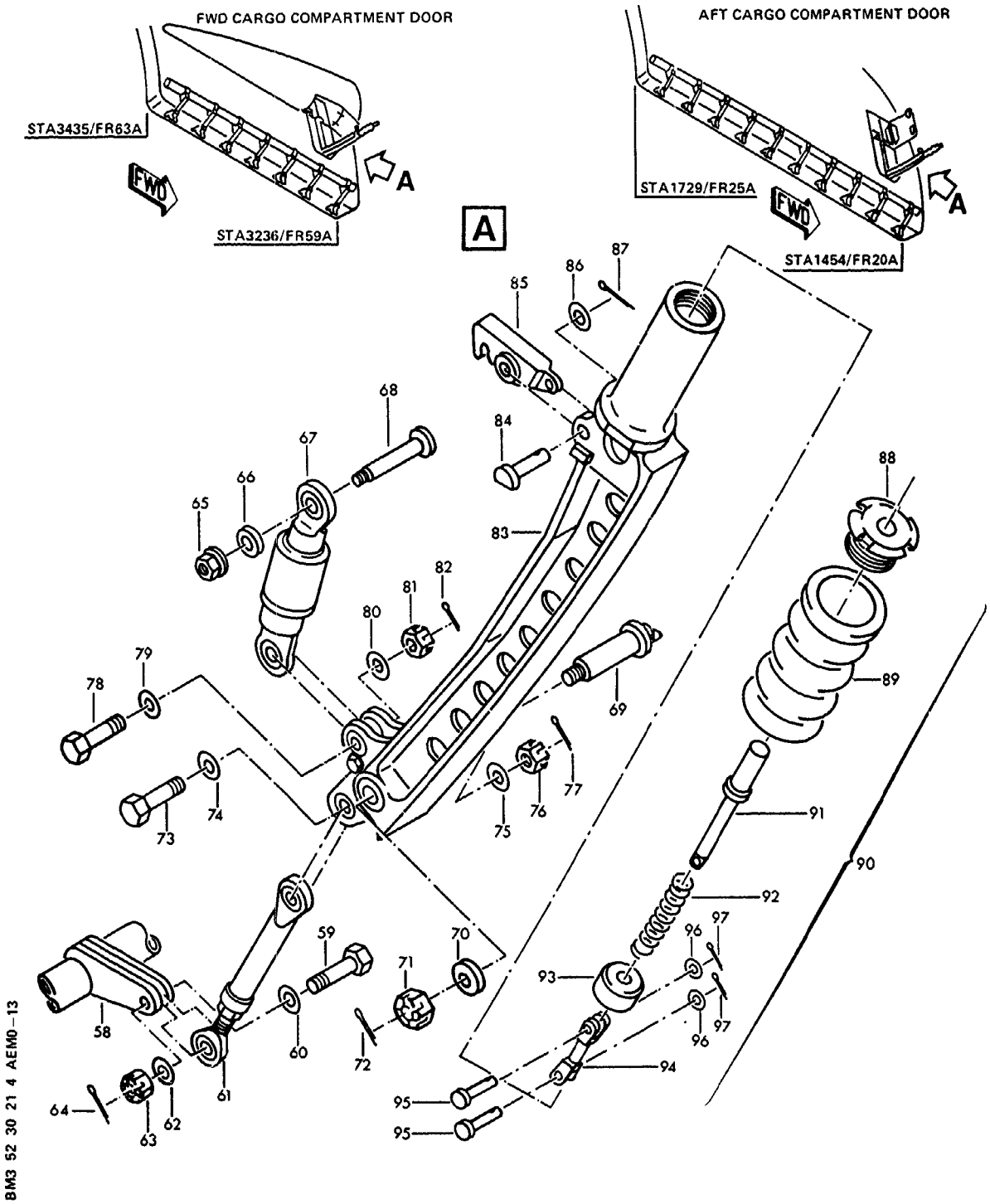
FWD and AFT Cargo Compartment Door - Locking Unit
Figure 401



BM3 52 30 21 4 ACM0-13

FWD and AFT Cargo Compartment Door - Torque Shaft Assy
Figure 402

(2)Indicator Flag (31) Without Locking Unit (20).
  (a)Remove lockwire from bolts (13).
  (b)Remove bolts (13), washers (14) and lock plate (15). Withdraw pin (16) from indicator flag (31).
  (c)Remove rubber stop (12) by removing bolts (10), washers (11) and rivet nut ledges (32),(33).
  (d)Remove cotter pin (29) and discard.
  (e)Remove castle nut (28), washer (27), bolt (26) and indicator flag (31).
  (f)Remove bushes (30) from indicator flag (31), if necessary.
(3)Torque Shaft Assy
  (a)Torque Tubes (51),(57),(58) Flexible Discs (47) (Torque Tube Assy).
    1 Remove lockwire from bolts (44),(50) connecting torque tube assy and flanged bearing (43),(56) by means of flexible disc (47).
    2 Remove bolts (50), washers (49) and flange washers (48) connecting flanged bearing (43),(56) and flexible disc (47).
    3 Remove nuts (41) and taper lock bolts (42) connecting torque shaft lever (17) and flanged bearing (43),(56).
    4 Remove rod (61) of operating handle (83) from torque tube (58) by removing cotter pin (64), castle nut (63), washers (62),(60) and bolt (59).
    5 Disconnect rod (53) of switch actuating assy from torque tube (51) by removing cotter pin (55), washer (54) and pin (52).
    6 Push flanged bearings (43),(56) into door frame and remove torque tube assy.
    7 If necessary, remove bolts (44), washers (45) and flange washers (46) and disconnect torque tube (51),(57),(58) from flexible disc (47).
  (b)Inner (56) and Outer (43) Flanged Bearing
    1 Remove torque tubes (51),(57),(58) including flexible disc (47) (refer to step (3)(a)).
    2 Rotate torque shaft lever (17) until pin (18) is accessible through the mounting hole.
    3 Disconnect torque shaft lever (17) and spring unit (21) by removing circlip (19) and pin (18).
    4 Support torque shaft lever (17) and withdraw outer (43) and inner (56) flanged bearing from door frame. Remove torque shaft lever (17).
  (c)Control shaft (40)
    1 Remove nuts (41) and taper lock bolts (42) connecting torque shaft lever (17) and flanged bearing (43).
    2 Withdraw control shaft (40) from door frame.
(4)Operating Handle (83).
   (Ref. Fig. 403)
  (a)Disconnect rod (61) from torque shaft by removing cotter pin (64), nut (63), washers (60),(62) and bolt (59). Discard cotter pin (64).
  (b)Open access door 811CR (152KR) and pull down operating handle.
  (c)Remove nut (65), washer (66) and bolt (68) connecting spring unit (67) and door structure.
    NOTE : Washer (66) is only installed on FWD cargo compartment door.
  (d)Remove cotter pin (72), nut (71), washer (70) and bolt (69) connecting operating handle (83) and door structure. Discard cotter pin (72).



FWD and AFT Cargo Compartment Door -
Operating Handle
Figure 403

(e)Remove operating handle (83) with rod (61) and spring unit (67) from door structure.
(f)Disconnect rod (61) from operating handle (83) by removing cotter pin (77), castle nut (76), washers (74),(75) and bolt (73).
(g)Disconnect spring unit (67) from operating handle (83) by removing cotter pin (82), castle nut (81), washers (79),(80) and bolt (78).

(5)Latching Mechanism of Operating Handle (90)
(a)Remove cotter pin (97), washer (96) and bolt (95) from link (94) and latch (85).
(b)Remove cotter pin (87), washer (86) and bolt (84) and withdraw latch (85) from operating handle (83).
(c)Remove nut (88) and withdraw grip (89).
NOTE : Spring (92) is loaded.
(d)Withdraw rod (91), spring (92), bush (93) and link (94) from operating handle (83).
(e)Remove cotter pin (97), washer (96) and bolt (95) and disconnect rod (91), spring (92) and bush (93) from link (94).

(6)Switch Actuating Assy
(Ref. Fig. 404)
(Ref. Fig. 405)
(a)Disconnect electrical connector (104) from limit switch 14WS (32WS) (116) and blank off open ends.
(b)Remove cotter pin (123), washer (122) and pin (121) from rod (53) and switch lever assy (120). Discard cotter pin (123).
(c)Disconnect rod (53) from torque tube (51) by removing of cotter pin (55), washer (54) and pin (52).
(d)Remove screws (103),(128) and withdraw housing (102) including switch lever assy (120) from door structure.
(e)Remove lockwire from pins (100),(101). Remove cotter pins (117), washers (118) and pin (101) from housing (102).
(f)Remove pin (100) and withdraw switch lever assy (120) from housing (102).
(g)If necessary, remove nut, lockwasher and limit switch 14WS (32WS) (116) from housing (102) (Ref. 52-71-11, P. Block 401).

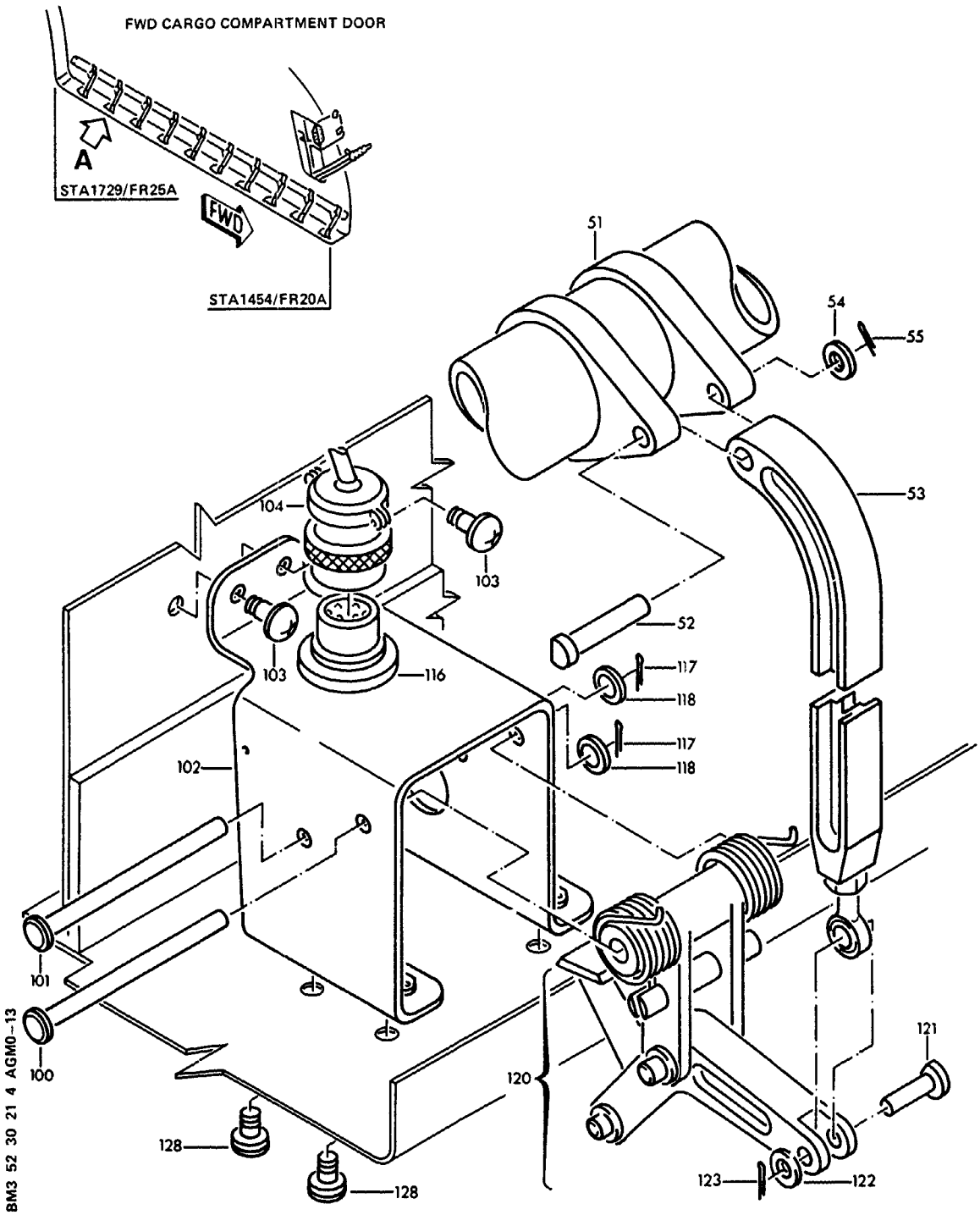
** ON AFT CARGO COMPARTMENT DOOR ONLY

(h)Remove cotter pin (113), washer (114) and pin (105) connecting shaft coupling (109) and torque assy (51).
(i)Remove nuts (108), bolts (106) and spacers (107) and disconnect shaft coupling (109) from torque tube (51).

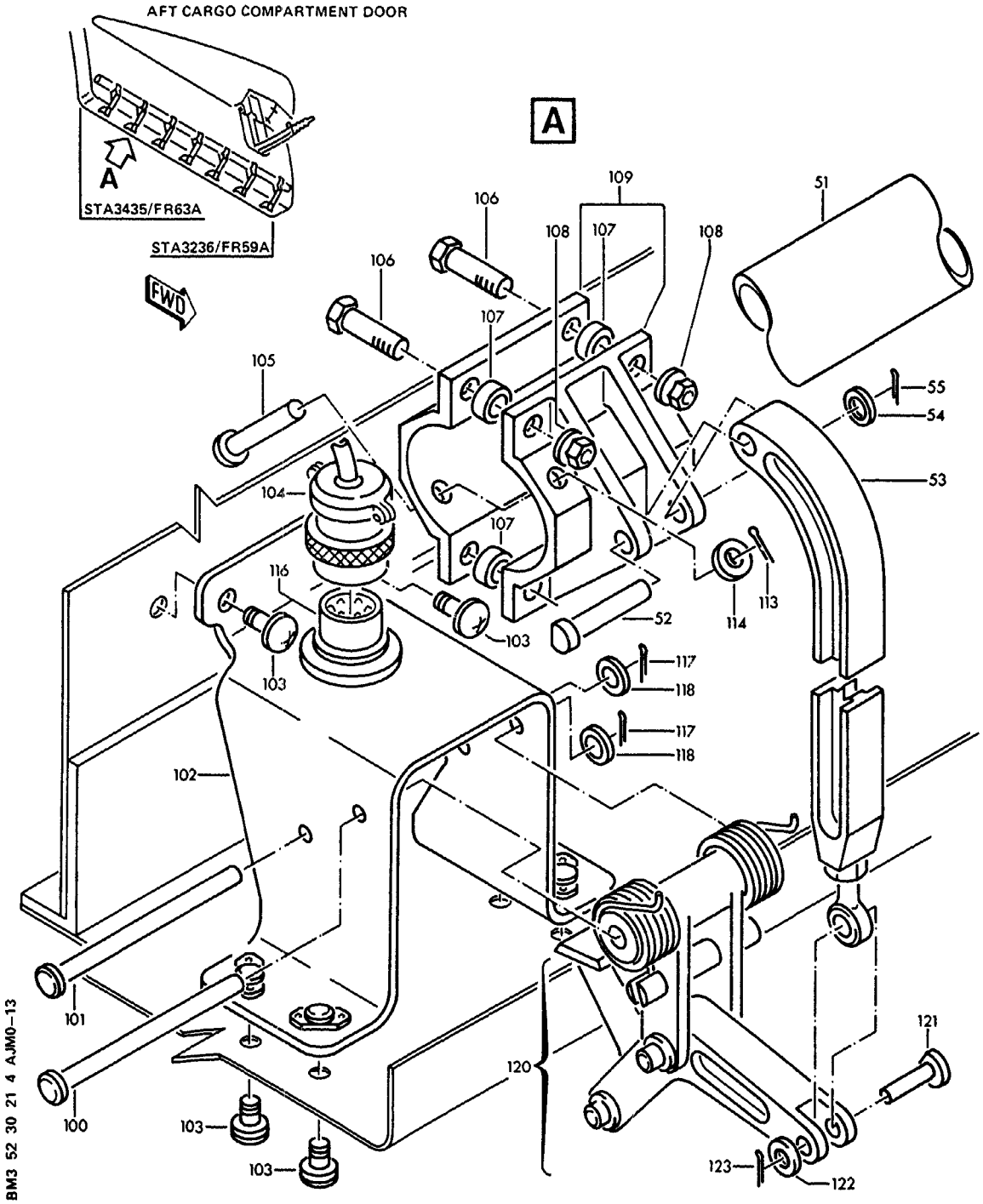
(7)Switch Mechanism
(Ref. Fig. 406)

** ON FWD CARGO COMPARTMENT DOOR

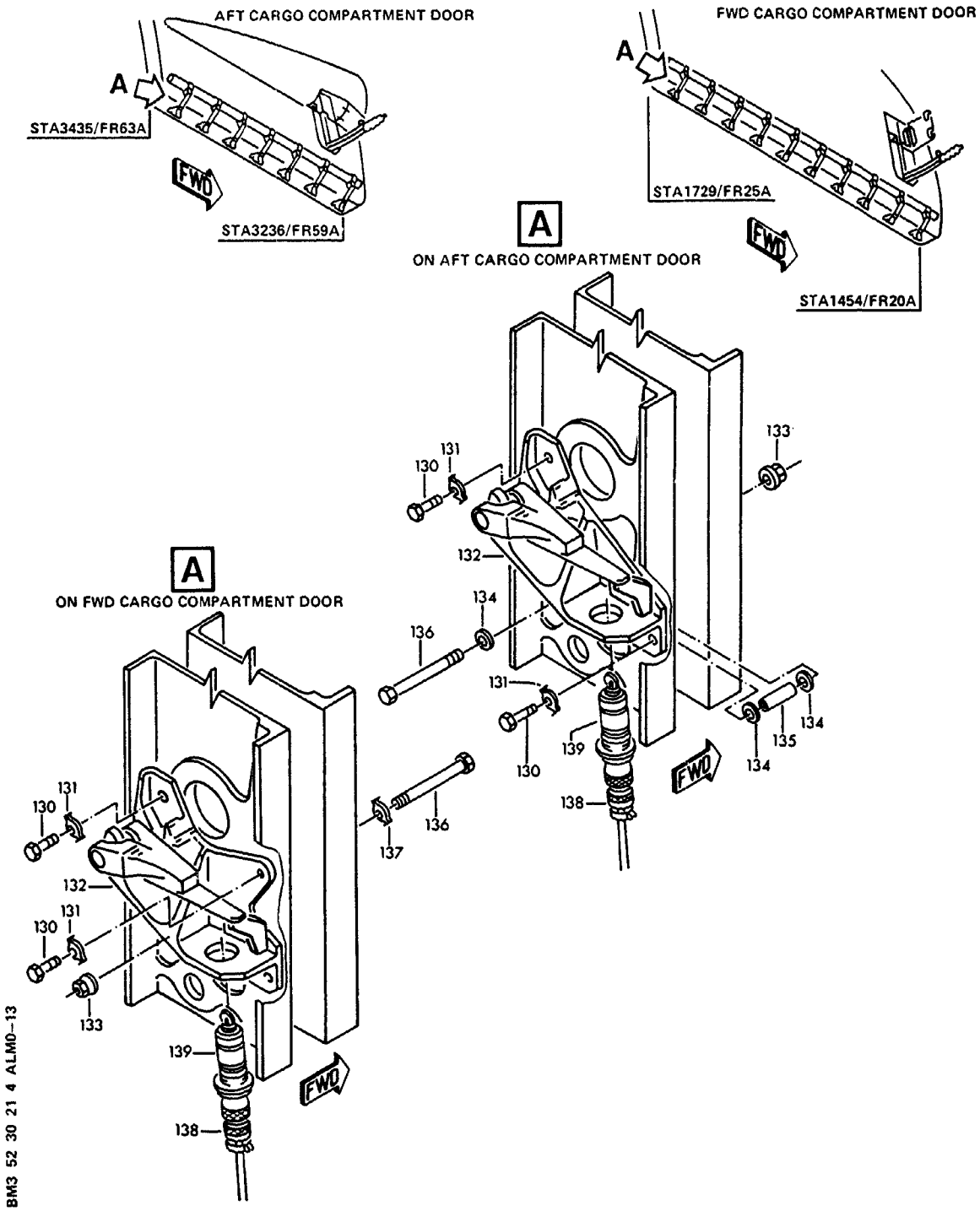
(a)Make certain that cargo compartment door is in unlocked position.
(b)Release locking washer (137) and remove nut (133) and bolt (136) with locking washer (137).



FWD Cargo Compartment Door - Switch Actuating Assy
Figure 404



AFT Cargo Compartment Door - Switch Actuating Assy
Figure 405



Switch Mechanism
Figure 406

** ON AFT CARGO COMPARTMENT DOOR

(a)Make certain that cargo compartment door is in unlocked position.
(b)Remove nut (133), bolt (136), washers (134) and spacer (135).

** ON FWD AND AFT CARGO COMPARTMENT DOORS

(c)Disconnect electrical connector (138) from limit switch 21MJ (22MJ) (139) and blank off open ends.
(d)Release locking washers (131).
(e)Remove bolts (130) with locking washers (131) and remove mounting bracket (132) with limit switch 21MJ (22MJ).
(f)Remove nut, lockwasher and limit switch 21MJ (22MJ) (139) from mounting bracket (132) (Ref. 52-35-13, P. Block 401).

C. Preparation for Installation
(1)Clean all rotating and sliding components and apply synthetic grease (Material No. 04-004).

D. Installation
(1)Locking Unit (20) Including Spring Unit (21)
(a)Make certain that operating handle is unlocked.
(b)If removed, install spring unit (21) to locking unit (20) by using pin (22) and circlip (23).
(c)Rotate torque shaft lever (17) until bore of lever is aligned with mounting hole of door frame.
(d)Position replacement locking unit (20) to torque shaft lever (17) and connect both parts with pin (18) and secure with circlip (19).
(e)Check taper lock bolts (42) for damage.
(f)Align bores in torque shaft lever (17) with bores in flange bearings (43),(56) and insert taper lock bolts (42) without grease.
(g)Load taper lock bolts (42) with a 5 daN (11.24 lbf.) weight.
CAUTION : THE HEADS OF THE TAPER LOCK BOLTS (42) MUST PROJECT BETWEEN 1.0 AND 1.5 mm (0.04 AND 0.06 in.). IF THIS DIMENSION CANNOT BE OBTAINED USING RETAINED TAPER LOCK BOLTS (42), OVERSIZE BOLTS MUST BE USED.
(h)Slightly tap head of taper lock bolts (42) to ensure a positive location and install nuts (41).
(i)TORQUE nuts (41) to between:
- On FWD cargo compartment door 0.28 and 0.30 m.daN (25 and 27 lbf.in.)
- On AFT cargo compartment door 0.32 and 0.38 m.daN (28 and 34 lbf.in.)
(j)Apply grease (Material No. 04-004) to bolts (1),(6) and pin (16).
(k)Position locking unit (20) to door frame and install bolt (6), washer (7) and castle nut (8) on locking hook (25).
(l)Install bolt (1), tab washer (2), washer (3) and castle nut (4) on bellcrank (24).
(m)Tighten castle nuts (8),(4) and back off to next cotter pin hole. Install cotter pins (5),(9).
(n)Install rubber stop (12) with screws (10), washers (11) and rivet nut ledges (32) and (33).
(o)Position pin (16) to indicator flag (31) and install lock plate (15)

with bolts (13) and washer (14).
(p)TORQUE bolts (13) to between 0.1 and 0.15 m.daN (8.85 and 13.28 lbf.in.).
(q)Adjust Dead Center 'a' and 'b', Spring Unit and Indicator Flag of locking unit (20) (Ref. 52-30-21, P. Block 501).

(2)Indicator Flag (31) Without Locking Unit (20)
(a)Position indicator flag (31) on locking unit (20) and install bolt (26), washer (27) and castle nut (28).
(b)Tighten castle nut (28) and secure with cotter pin (29).
(c)Install bushes (30) on indicator flag (31), if removed.
(d)Lightly grease pin (16) with synthetic grease (Material No. 04-004) and install on indicator flag (31).
(e)Install rubber stop (12) with screws (10), washers (11) and rivet nut ledges (32),(33).
(f)Install lock plate (15) with bolts (13) and washers (14) for mounting of pin (16).
(g)TORQUE bolts (13) to between 0.1 and 0.15 m.daN (8.85 and 13.28 lbf.in.).
(h)Adjust indicator flag (31) (Ref. 52-30-21, P. Block 501).

(3)Torque Shaft Assy
(a)Torque Tubes (51),(57),(58) Including Flexible Discs (47) (Torque Tube Assy)
1 If removed, install flexible discs (47) on replacement torque tubes (51),(57),(58) with flange washers (46), washers (45) and bolts (44).
2 Apply synthetic grease (Material No. 04-004 to flanged bearings (43), (56) and push flanged bearings (43,(56) into door frame.
3 Position torque tube assy and connect to flanged bearings (43),(56) by means of flanged washers (48), washers (49) and bolts (50).
4 Tighten bolts (50) and secure bolts (44) and bolts (50) with lockwire.
5 Install taper lock bolts (42) and nuts (41) to connect torque shaft lever (17) with flanged bearings (43),(56).
NOTE : For installation of taper lock bolts refer to steps D(1)(e) thru D(1)(i).
6 Position rod (61) of operating handle (83) to torque tube (58) and install bolt (59), washers (60),(62) and castle nut (63).
7 Tighten castle nut (63) and secure with cotter pin (64).
8 Position rod (53) of switch actuating assy to torque tube (51) and install pin (52), washer (54) and cotter pin (55).
NOTE : If torque tube (51) located between FR62A and FR63 has been replaced, make certain that shaft coupling (109) is installed on replacement torque tube (51). For installation refer to steps D(6)(i) thru D(6)(k).

(b)Inner (56) and Outer (43) Flanged Bearings
1 Apply synthetic grease (Material No. 04-004) to replacement inner (56) and outer (43) bearings and torque shaft lever (17).
2 Position torque shaft lever (17) to door frame and install inner (56) and outer (43) flanged bearings.
3 Rotate torque shaft lever (17) until pin (18) can be installed through mounting hole.
4 Install pin (18) to connect torque shaft lever (17) and spring

unit (21) and secure with circlip (19).
5 Install torque tubes (51),(57),(58) including flexible discs (47) (refer to step D(3)(a)).

(c)Control Shaft (40)
1 Apply synthetic grease (Material No. 04-004) to replacement control shaft (40).
2 Insert control shaft (40) into outer flanged bearing (43).
NOTE : For adjustment of limit switch refer to 52-35-13, P. Block 501.
3 Install taper lock bolts (42) and nuts (41) to connect control shaft (40) with outer flanged bearing (43) and torque shaft lever (17).
NOTE : For installation of taper lock bolts refer to steps D(1)(e) thru D(1)(i).
4 Install torque tubes (51) and (58) including flexible disc (47) (refer to step (3)(a)).
5 Check and adjust Dead Center 'a' and 'b', Spring Unit and Indicator Flag of locking unit (23) (Ref. 52-30-21, P. Block 501).

(4)Operating Handle (83)
(a)Position spring unit (67) to operating handle (83) and install bolt (78), washers (79),(80) and castle nut (81).
(b)Tighten castle nut (81) and secure with cotter pin (82).
(c)Position rod (61) to operating handle (83) and install bolt (73), washers (74),(75) and castle nut (76).
(d)Tighten castle nut (76) and secure with cotter pin (77).
(e)Apply synthetic grease (Material No. 04-004) to shaft of bolt (69).
(f)Position operating handle including spring unit (67) and rod (61) to handle recess of door structure and install bolt (69), washer (70) and castle nut (71).
(g)Tighten castle nut (71) and secure with cotter pin (72).
(h)Install bolt (68), washer (66) and nut (65) to connect spring unit (67) with door structure.
(i)Position rod (61) to torque tube (58) and connect both parts by means of bolts (59), washers (60),(62) and castle nut (63).
(j)Tighten castle nut (63) and secure with cotter pin (64).
(k)Carry out adjustment/test (Ref. 52-30-21, P. Block 501).

(5)Latching Mechanism of Operating Handle
(a)Apply synthetic grease (Material No. 04-004) to spring (92), bush (93) and rod (91) and position spring (92) and bush (93) on rod (91).
(b)Connect rod (91) and link (94) by means of bolt (95), washer (96) and cotter pin (97).
(c)Insert rod (91) with spring (92), bush (93) and link (94) into operating handle (83).
CAUTION : DO NOT CONTAMINATE THREAD WITH GREASE.
(d)Apply grease (Material No. 04-004) to the inside of operating handle housing (83).
(e)Position grip (89) on operating handle (83).
(f)Install nut (88) with loctite type I (Material No. 08-002) and tighten.
(g)Position latch (85) to operating handle (83) and install with bolt (84), washer (86) and cotter pin (87).
(h)Connect link (94) and latch (85) by means of bolt (95), washer (96) and cotter pin (97).

(i)Check and adjust door warning switch (Ref. 52-71-11, P. Block 501).

(6)Switch Actuating Assy

(a)If removed, position limit switch 14WS (32WS) (116) to housing (102) and mount with lockwasher and nut (Ref. 52-71-11, P. Block 401).

(b)Insert switch lever assy (120) to housing and install pins (100),(101), washers (118) and cotter pins (117).

(c)Secure pins (100),(101) with lockwire.

(d)Position housing (102) to door structure and attach with screws (103),(128).

(e)Connect rod (53) to torque tube (51) by means of pin (52), washer (54) and cotter pin (55).

NOTE : If shaft coupling (109) located between FR62A and FR63A has been removed, install shaft coupling (109) in accordance with steps D(6)(i) thru D(6)(k).

(f)Adjust eyebolt of rod (53) to 14.5 mm (0.571 in.) from rod end to eyebolt center and connect rod (53) with switch lever assy (120) by means of pin (121), washer (122) and cotter pin (123).

(g)Remove blanking caps and connect electrical connector (104) to limit switch 14WS (32WS) (116).

(h)Check and adjust door limit switches (Ref. 52-71-11, P. Block 501).

** ON AFT CARGO COMPARTMENT DOOR ONLY

(i)Apply sealant (Material No. 09-013) to pin (105).

(j)Position shaft couplings (109) to torque tube (51) and install bolts (106), spacers (107) and nuts (108).

(k)Install pin (105) to prohibit turning of shaft coupling (109), washer (114) and cotter pin (113).

** ON FWD AND AFT CARGO COMPARTMENT DOORS

(l)Coat projecting thread ends and bolt heads as follows:

1 For bolts attaching parts directly to door structure use polyurethane primer and polyurethane grey top coat (Material No. 16-001 and 16-002).

2 For bolts in mechanism use anti-corrosion compound (Material No. 05-002).

(7)Switch Mechanism

(a)Make certain that operating handle is in open position.

(b)Position mounting bracket (132) to door structure and install bolts (130) with new locking washers (131).

(c)Tighten bolts (130) and secure with locking washers (131).

(d)Position limit switch 21MJ (22MJ) (139) to mounting bracket (132) and secure with lockwasher and nut (Ref. 52-35-13, P. Block 401).

(e)Remove blanking caps and connect electrical connector (138) to limit switch 21MJ (22MJ) (139).

** ON FWD CARGO COMPARTMENT DOOR

(f)Apply anti-corrosion compound (Material No. 05-002) to shaft of bolt (136).
(g)Install bolt (136) and new locking washer (137).
(h)Install nut (133), tighten and secure with locking washer (137).
(i)Check and adjust limit switch 21MJ (22MJ) (139) (Ref. 52-35-13, P. Block 501).

** ON AFT CARGO COMPARTMENT DOOR

(f)Install bolt (136), washers (134) and spacer (135).
(g)Install nut (133) and tighten.
(h)Check and adjust limit switch 21MJ (22MJ) (139) (Ref. 52-35-13, P. Block 501).

** ON FWD AND AFT CARGO COMPARTMENT DOORS

E. Test
(1)Check that force required to operate operating handle does not exceed 15 daN (34 lbf.).
(2)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(3)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(4)Remove actuator safety lock (Ref. 52-30-00, P. Block 301).
(5)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1) and observe the following:
(a)Easy and smooth closing.
(b)Check that all indicator flags are flush with outer door skin.
(c)Check that operating handle locks in closed position.

F. Close-Up
(1)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(3)Make certain that water drain holes are clean and free from obstructions.
(4)Install access covers 811DR and 811ER (812DR and 812ER).
(5)Install access covers 811AR and 811BR (812AR and 812BR).
(6)Remove access platform.

FWD, AFT CARGO DOOR LOCKING MECHANISM - ADJUSTMENT/TEST

NOTE : For adjustment/test procedures of BULK Cargo Compartment Door refer to 52-34-11, P. Block 501.

1. Reason for the Job

A. Adjustment of the following items in cargo door locking mechanism.
NOTE : Item numbers correspond with operations in step 3.B.
(1)Dead Center "a"
(2)Dead Center "b"
(3)Spring Unit with Adjustment Set or
(4)Spring Unit with Sliding Caliper Gage
(5)Operating Handle
(6)Indicator Flag

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 to 3.0 m (9 to 10 ft.)
B. 98A52007521000	Jig - FWD and AFT Cargo Compartment Door Locking Mechanism
C. 98A52007522000	Jig - FWD and AFT Cargo Compartment Door Locking Mechanism
D. 98A52307590000	Setting Device, Spring Unit, Cargo Doors
E.	Straight Edge, approx. 1 m (40 in.)
F.	Lockwire, Corrosion-Resistant Steel, Dia. 1 mm (0.04 in.)
G.	Measuring Tools
H.	Tab Washer
I.	Cotter Pin
J.	Circuit Breaker Safety Clips and Tags
K. Material No. 05-027	Special Materials (Ref. 20-31-00)
L. Material No. 08-002	Bonding and Adhesive Compounds (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-30-21, P. Block 401	FWD, AFT Cargo Door Locking Mechanism
- 52-35-00, P. Block 501	Cargo Compartment Doors Electrical Control System
- 52-71-00, P. Block 501	Door Warning System

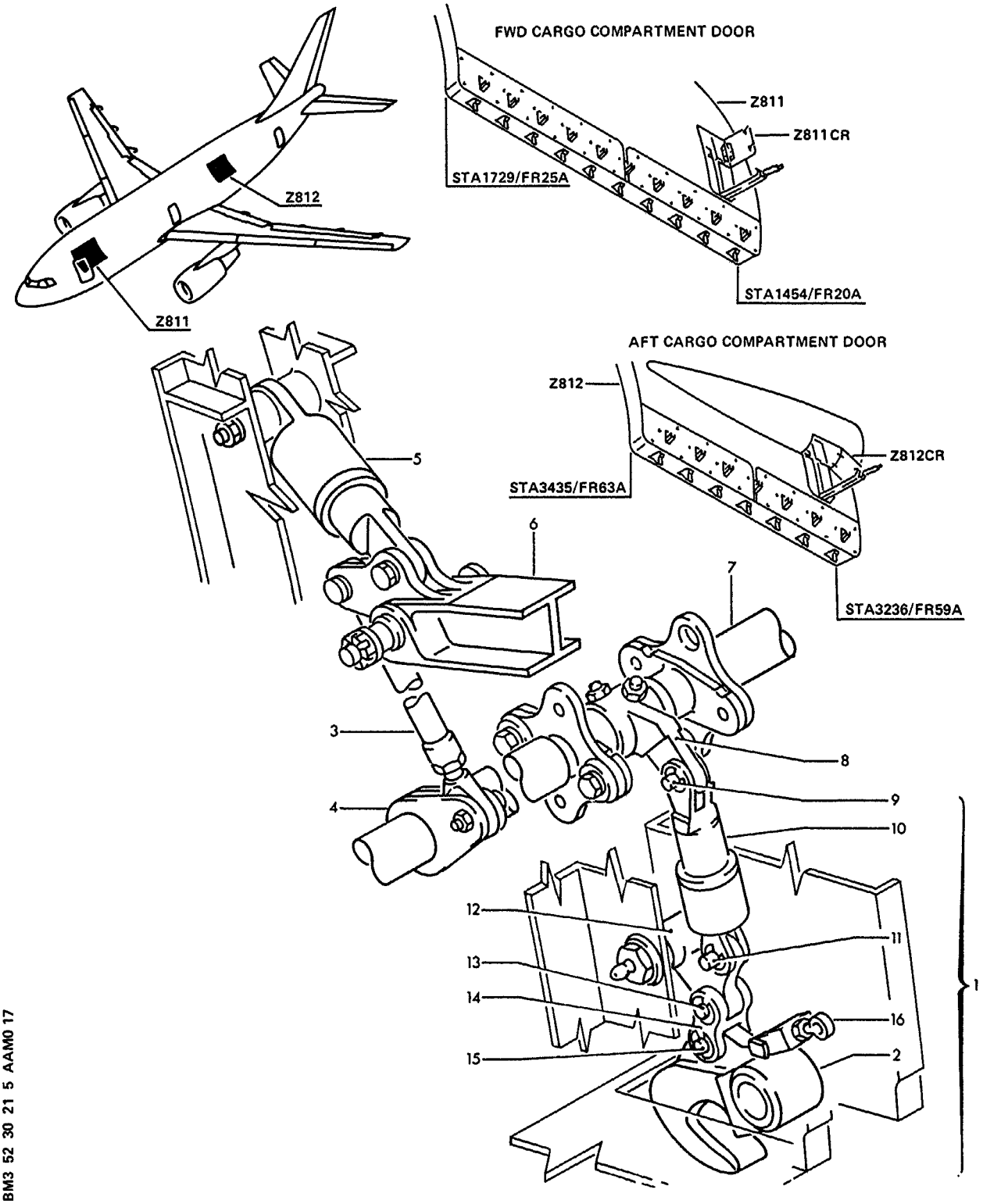
3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Remove access covers 811AR and 811BR or 812AR and 812BR.
(3)Open access panel 811CR or 812CR, to gain access to operating handle.
(4)Remove access covers 811DR and 811ER or 812DR and 812ER.
(5)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(6)Make certain that electronics racks ventilation is correct.
(7)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(8)Install door actuator safety lock to FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).
(9)Open, safety and tag the following circuit breakers:

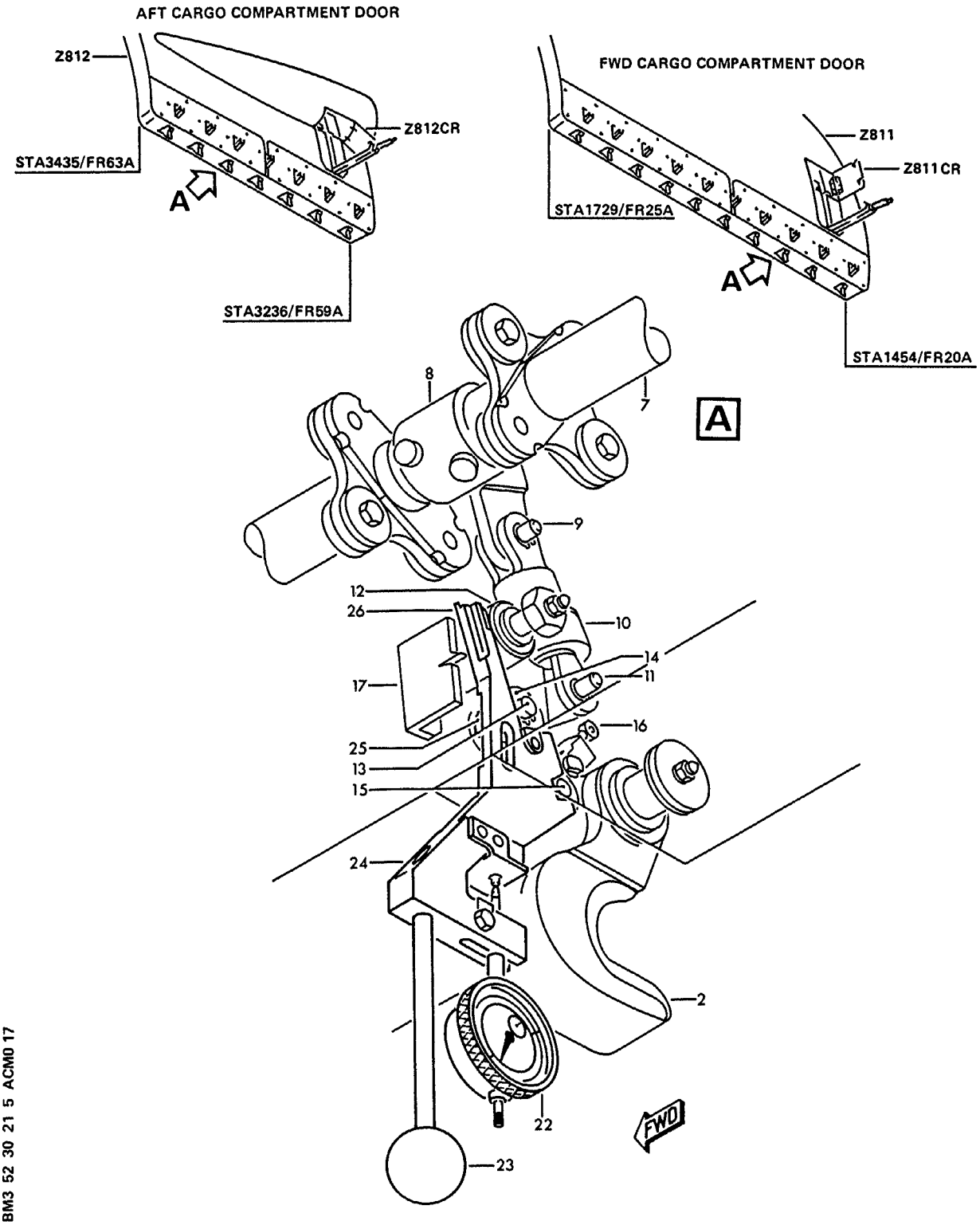
PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B7

(10)Remove indicator flags and rubber stops (Ref. 52-30-21, P. Block 401) from each door frame to gain access to each locking unit.

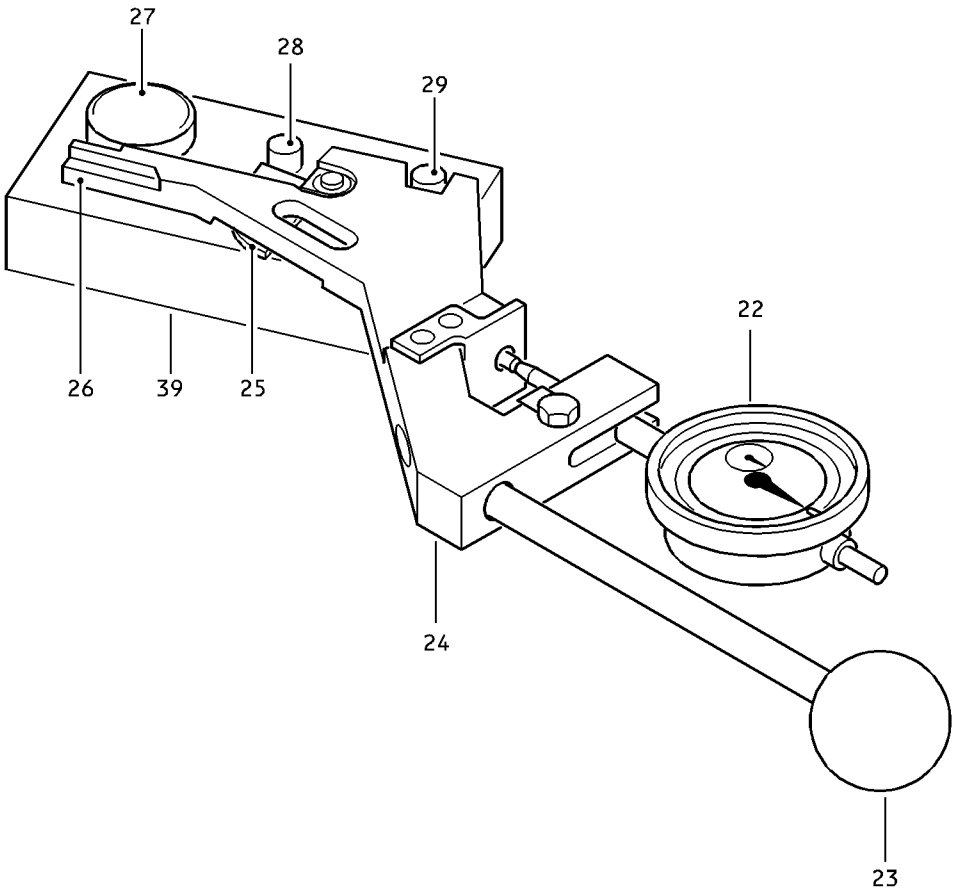
B. Adjustment
(1)Adjustment of Dead Center "a"
(Ref. Fig. 501)
(Ref. Fig. 502)
R (Ref. Fig. 503)
(Ref. Fig. 504)
(a)Make certain that operating handle (6) is in the downward position to get access to the stop bolt (20).
(b)Remove lockwire (21) from stop bolt (20).
(c)Release tap washer (19) and loosen locknut (18).
(d)Remove stop bolt (20) and re-install with new tab washer (19).
(e)Push operating handle upwards into recess until it locks.
R (f)Calibrate the clock gage (22) of adjustment jig PN 98A52007522000 by
R means of adjustment gage PN 98A52007522100 to the zero position as
R follows:
R 1 Position jig body (24) to adjustment gage (39) so that its tapered
R cutout engages with gage pin (29).
R 2 Move jig handle (23) until stop rail (26) contacts boss pin (27)
R and segment lever (25) touches stop pin (28).
R 3 Adjust clock gage (22) so that its pointer(s) is(are) in the zero
R position.
(g)Measure dead center "a" on all locking units (1) by means of adjustment jig PN 98A52007522200 as follows:
1 Position jig body (24) from bottom side of cargo compartment door to connecting link (14).
2 Make certain that tapered cutout of jig body (24) is fitted around lower hinge pin (15) of connecting link (14).



FWD and AFT Cargo Compartment Doors -
Location of Locking Components
Figure 501



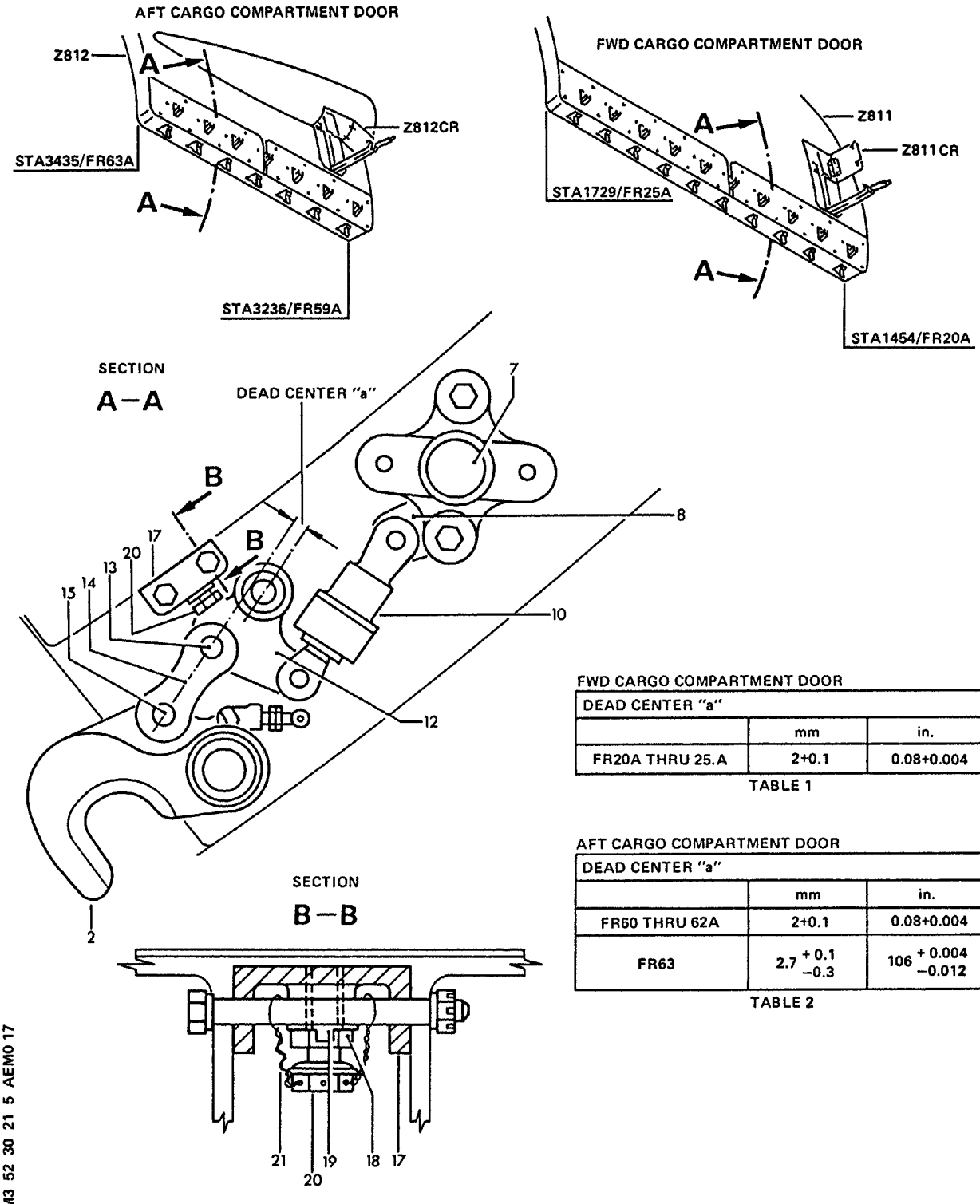
FWD and AFT Cargo Compartment Doors -
Adjustment Jig of Dead Center "a"
Figure 502



BM6 52 30 21 5 ADMO 00

Calibration of Adjustment Jig
Figure 503

R



FWD CARGO COMPARTMENT DOOR

DEAD CENTER "a"		
	mm	in.
FR20A THRU 25.A	2+0.1	0.08+0.004

TABLE 1

AFT CARGO COMPARTMENT DOOR

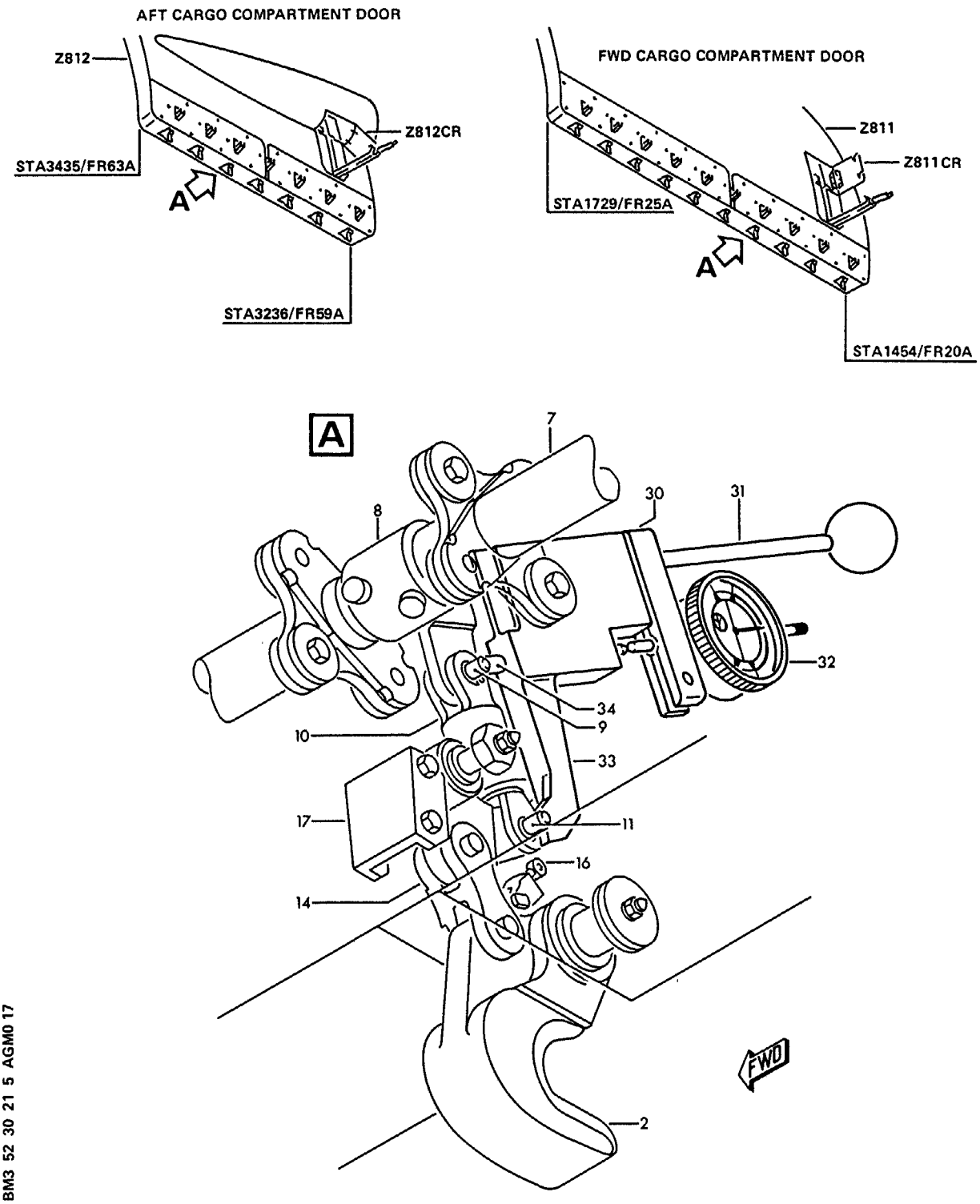
DEAD CENTER "a"		
	mm	in.
FR60 THRU 62A	2+0.1	0.08+0.004
FR63	$2.7^{+0.1}_{-0.3}$	$106^{+0.004}_{-0.012}$

TABLE 2

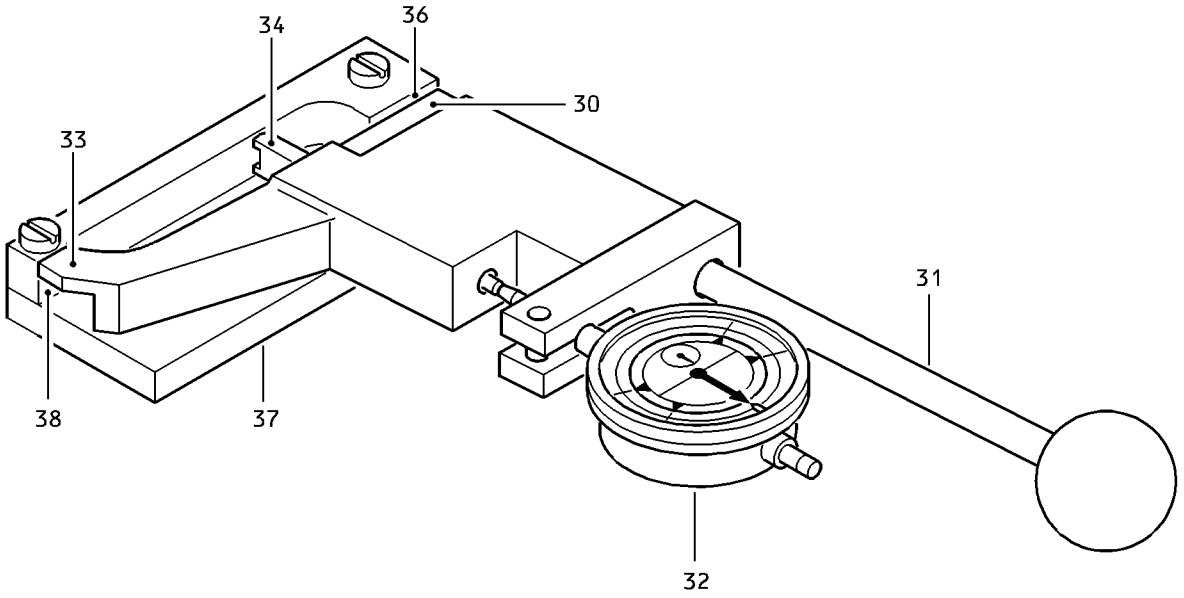
Dead Center "a" of FWD and AFT Cargo Compartment Door
Figure 504

3 Move jig handle (23) until stop rail (26) of jig body (24) contacts boss of bellcrank lever (12).
NOTE : Segment lever (25) is pressed by a spring-loaded pin against upper hinge pin (13) of connecting link (14) to transmit dimension of dead center "a" to clock gage (22).
4 Read dimension of dead center "a" on clock gage (22) and record.
(h)Turn stop bolt (20) until dimension of dead center "a" is obtained.
(i)Tighten locknut (18) and secure with tab washer (19).
(j)Secure stop bolt (20) with lockwire (21).

(2)Adjustment of Dead Center "b"
(Ref. Fig. 505)
(Ref. Fig. 506)
(Ref. Fig. 507)
NOTE : Adjustment of dead center "b" can be made for all locking units on linkage (3).
(a)Close and lock FWD (AFT) cargo compartment door by means of hand pump (Ref. 52-30-00, P. Block 1).
(b)Disconnect linkage (3), consisting of rod (40) and rod end (46), from operating lever (4) by removing cotter pin (45), nut (44), washer (43) and bolt (47).
(c)Measure and record length of linkage (3) to gain pre-setting measure.
NOTE : Extending of linkage (3) increases dimension of dead center "b".
(d)Release tab washer (41) and loosen locknut (42).
(e)Remove rod-end (46) from rod (40) and re-install with new tab washer (41).
(f)Temporary connect linkage (3) on operating lever (4) by means of bolt (47).
(g)Calibrate the clock gage (32) of adjusting jig PN 98A52007521000 by means of adjustment gage PN 98A52007521100 to zero position as follows:
1 Position jig body (30) to the adjustment gage (37) so that their locating face contacts the calibration face (36) and the jig arm (33) touches the calibration face (38).
NOTE : Make sure that the check pin (34) also has contact.
2 Adjust clock gage (32) so that its pointer(s) is(are) in the zero position.
(h)Measure dead center "b" on all locking units (1) by means of adjustment gage PN 98A52007521000 as follows:
CAUTION : IF DEAD CENTER DIMENSIONS ARE DIFFERENT FROM FRAME TO FRAME, THE MINIMUM MEASURED DIMENSION MUST NOT BE LESS THAN LISTED IN
R TABLES OF FIG. 507.
1 Bring locating face of jig arm (33) into contact with hinge pin (11) of spring unit (10).
2 Position locating face of jig body (30) in contact with hub of torque shaft lever (8).
NOTE : The slotted head of check pin (34) is pressed by means of a spring against the upper hinge pin (9) of spring unit (10) to transmit dimension of dead center "b" to clock gage (32).
3 Read dimension of dead center "b" on clock gage (32) and record.
(i)If dead center "b" exceeds limit, disconnect linkage (3) from operating



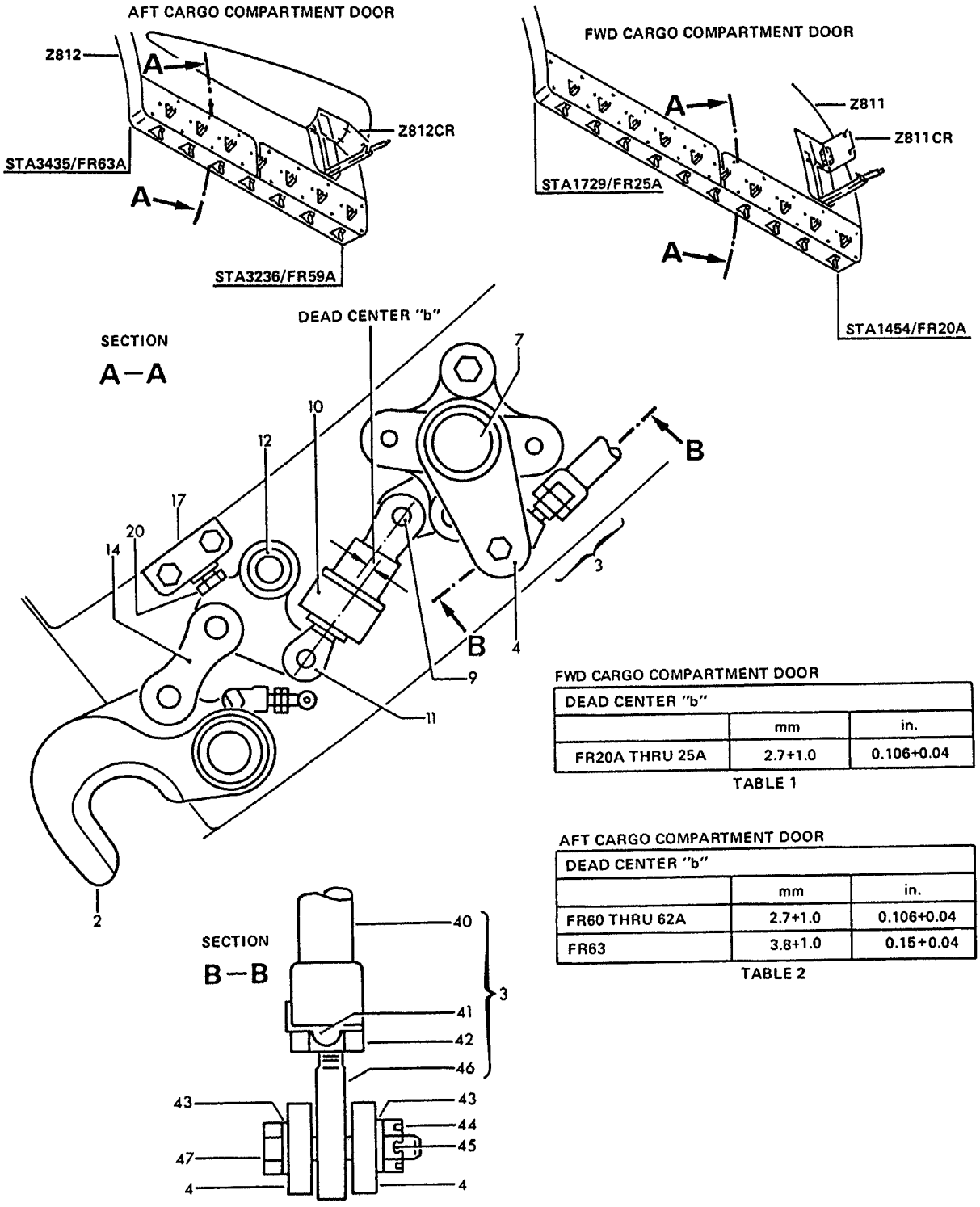
FWD and AFT Cargo Compartment Doors -
Adjustment Jig of Dead Center "b"
Figure 505



BM6 52 30 21 5 AHMO 00

R

Calibration of Adjustment Jig
Figure 506



FWD CARGO COMPARTMENT DOOR

DEAD CENTER "b"		
	mm	in.
FR20A THRU 25A	2.7+1.0	0.106+0.04

TABLE 1

AFT CARGO COMPARTMENT DOOR

DEAD CENTER "b"		
	mm	in.
FR60 THRU 62A	2.7+1.0	0.106+0.04
FR63	3.8+1.0	0.15+0.04

TABLE 2

BM6 52 30 21 5 AJMO 01

R Dead Center "b" of FWD and AFT Cargo Compartment Door
Figure 507

lever (4) by removing bolt (47) and turn rod end (46) either in or out (refer to NOTE to step (c)).

(j)Connect linkage (3) and operating lever (4) with bolt (47), washers (43) and nut (44).

(k)Tighten nut (44) and secure with new cotter pin.

(l)Tighten locknut (42) and secure with tab washer (41).

(3)Adjustment of Spring Unit with Setting Device PN 98A52307590000
(Ref. Fig. 508)
(Ref. Fig. 509)
(Ref. Fig. 510)

NOTE : If setting device PN 98A52307590000 is not available, carry out adjustment in accordance with Para 3.B.(4).

(a)Make certain that all dead centers "a" and "b" have been adjusted.

(b)Make certain that FWD or AFT cargo compartment door is fully opened and the door actuator safety lock is installed.

(c)Remove circlips (56) from lower hinge (11) and upper hinge pin (9) of spring unit (10).

(d)Remove cotter pin (55), castle nut (54), washer (53), tab washer (52) and bolt (51) from door frame.

(e)Pull bellcrank lever (12) together with spring unit (10) from door structure and remove lower hinge pin (11) of spring unit.

(f)Rotate torque shaft lever (8) by means of operating handle (6) until upper hinge pin (9) can be removed through mounting hole of door frame.

(g)Disconnect spring unit (10) from torque shaft lever (8) by removing upper hinge pin (9).

(h)Adjust dial indicator (61) of measuring gauge PN 98A52307590200 by means of the Go-No-Go gauge PN 98A52307590220 to zero position.

NOTE : For adjustment of zero position on STA4150/FR63 of AFT cargo compartment door only, the Go-No-Go gauge PN 98A52307590230 must be used.

(i)Insert special pins (60) in bellcrank lever (12) and in torque shaft lever (8).

(j)Set the bellcrank lever (12) in its installation position and attach it temporarily with bolt (51) and castle nut (54) on door frame.

(k)Position measuring body (62) between bellcrank lever (12) and torque shaft lever (8) so that cutouts of measuring body (62) fit around special pins (60).

(l)Push operating handle (6) upwards into recess until it locks.

(m)Read dimension from dial indicator (61) and record.

NOTE : This dimension which must be between 0.7 mm and 1.0 mm (0.03 and 0.04 in.) represents the amount by which spring unit (10) is compressed when operating handle (6) is set in recess.

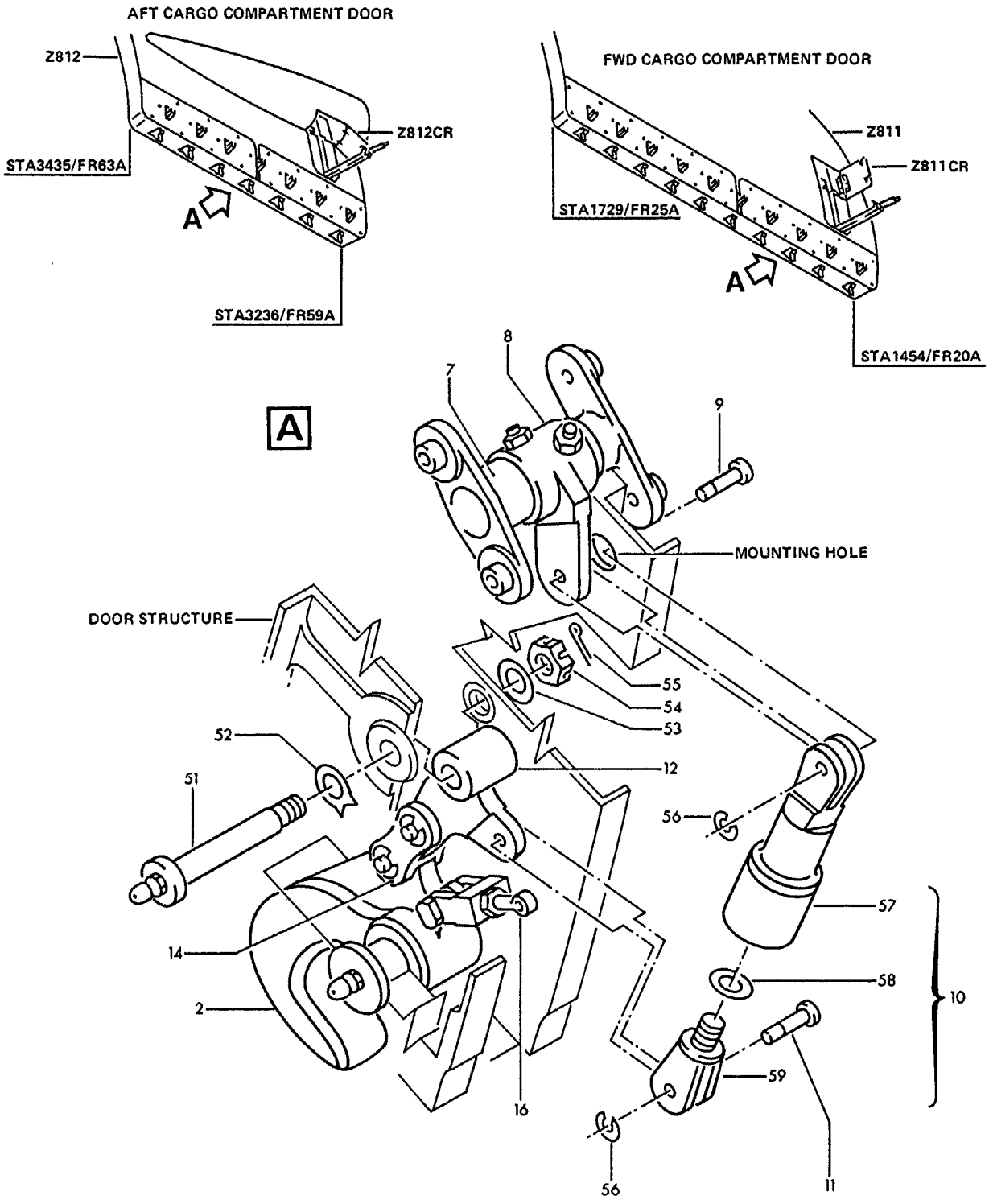
(n)Remove measuring body (62) from bellcrank lever (12) and torque shaft lever (8).

(o)If compression of spring unit exceeds limits, modify length of removed spring unit (10) as follows:

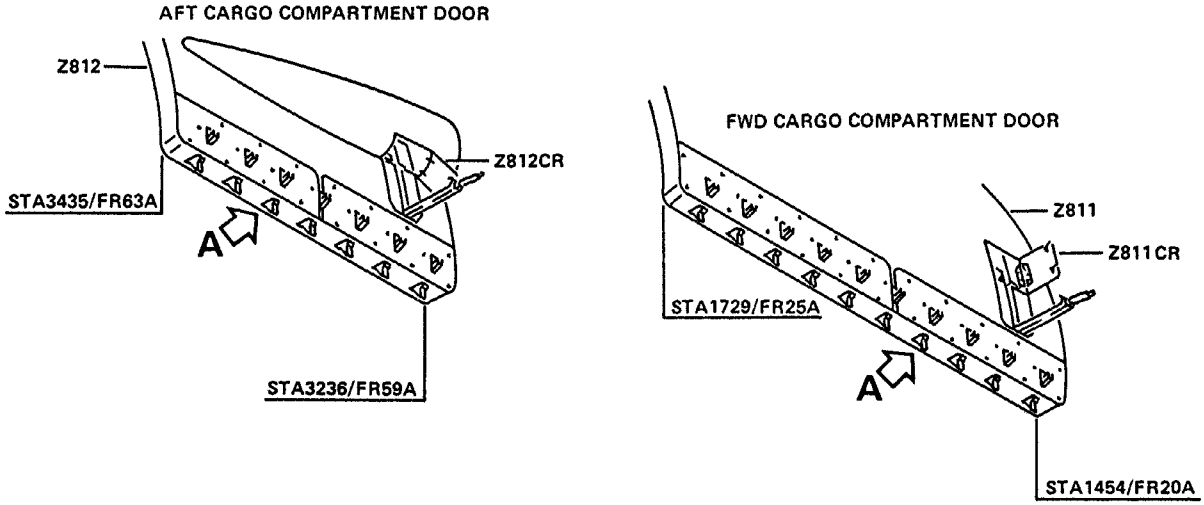
1 Cut and remove lockwire from spring sleeve (57).

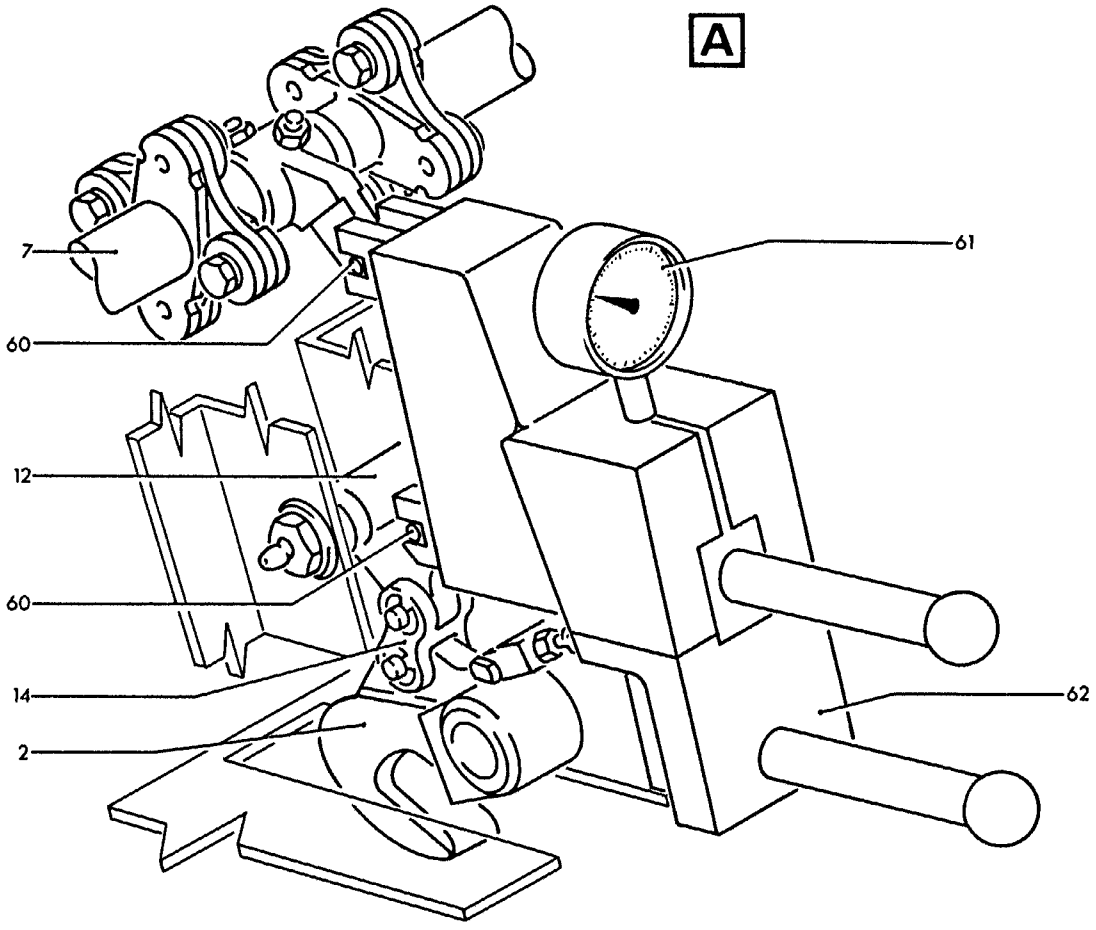
2 Hold spring sleeve (57) and remove fork end (59).

3 If compression is less than 0.7 mm (0.03 in.), add washer (58) on fork end (59); if compression is more than 1.0 mm (0.04 in.),



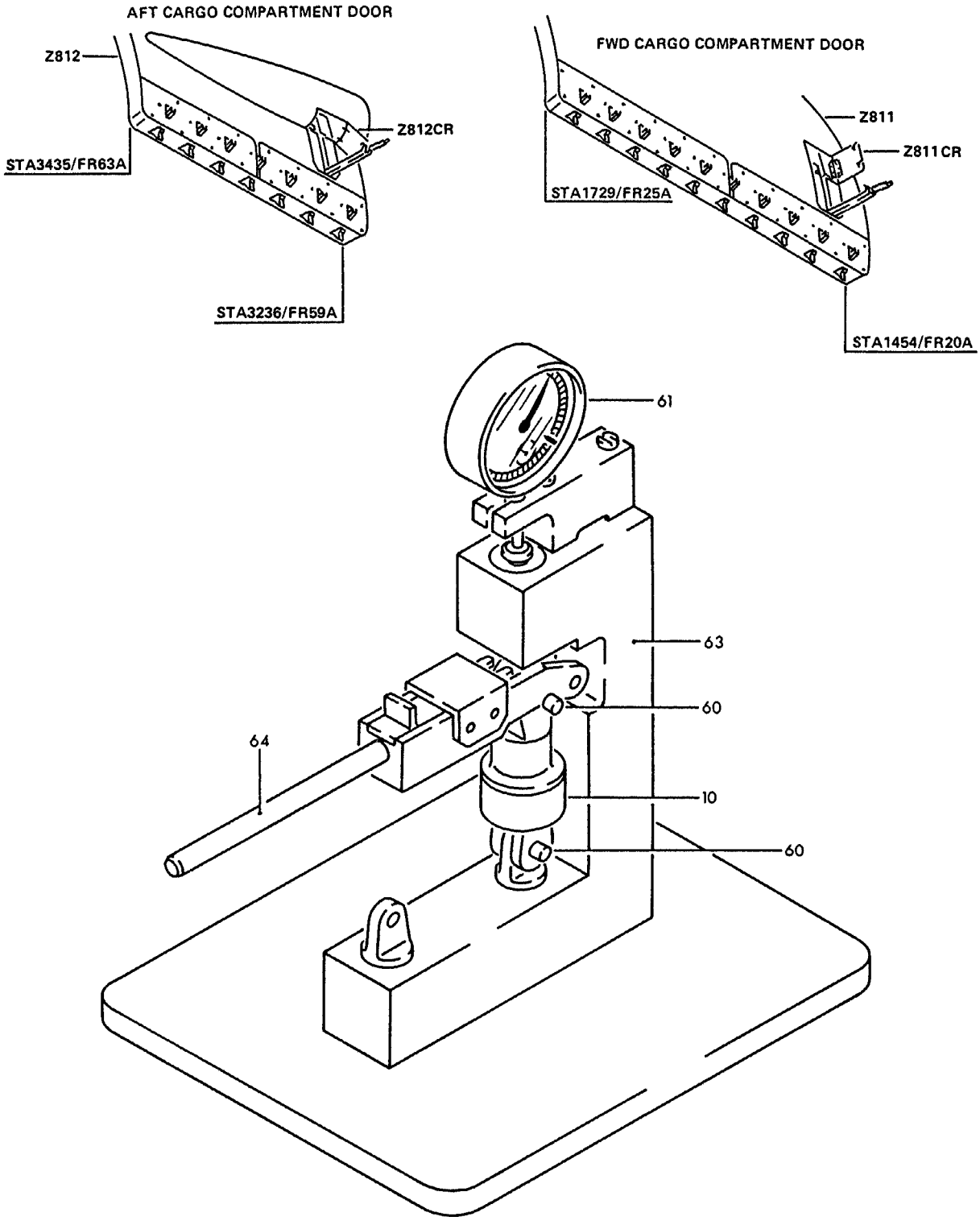
FWD and AFT Cargo Compartment Doors-
Spring Unit of Locking Unit
Figure 508





BM3 52 30 21 5 ANM0 17

Measuring Gage of Spring Unit
Figure 509

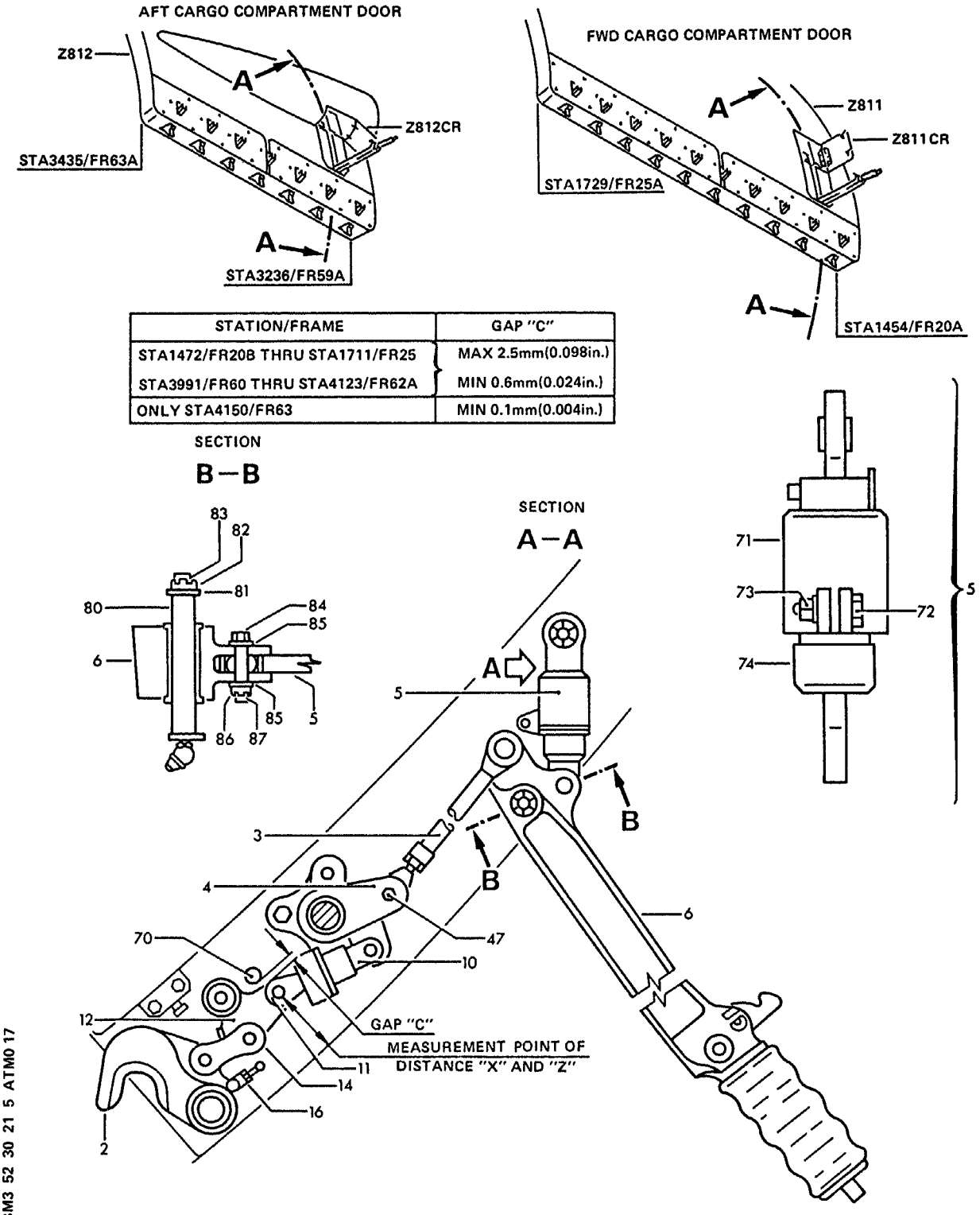


Adjustment Gauge of Spring Unit
Figure 510

remove washer (58) from fork end (59).
NOTE : Thickness of washer (58) is 0.3 mm (0.01 in.).
4 Install fork end (59) and secure with lockwire to spring sleeve (57).
(p)Check total stroke of removed spring unit (10) with adjustment gauge PN 98A52307590100 as follows:
1 Position spring unit (10) on testing body (63) and insert special pins (60).
2 Set dial indicator (61) to zero position.
3 Press lever (64) downwards and check compressed distance on dial indicator (61), which must be 1.2 mm (0.05 in.).
(q)Remove temporarily installed castle nut (54), bolt (51) and bellcrank lever (12) from door frame.
(r)Position spring unit (10) on torque shaft lever (8) and install upper hinge pin (9) through mounting hole of door frame.
(s)Install spring unit (10) to bellcrank lever (12) by means of lower hinge pin (11).
(t)Push bellcrank lever (12) together with spring unit (10) into door structure and install bolt (51), tab washer (52), washer (53) and castle nut (54).
(u)Tighten castle nut (54) and secure with cotter pin (55).
(v)Secure lower hinge pin (11) and upper hinge pin (9) with circlips (56).

(4)Adjustment of Spring Unit with Sliding Caliper Gage
(a)Make certain that all dead centers "a" and "b" have been adjusted.
(b)Make certain that FWD or AFT cargo compartment door is fully opened and the door actuator safety lock is installed.
(c)Measure distance between lower hinge pin (9) and upper hinge pin (11) and record length of released spring unit (10).
(d)Push operating handle (6) upwards into recess until it locks.
(e)Measure distance between lower hinge pin (11) and upper hinge pin (9) and record length of compressed spring unit (10).
(f)Subtract compressed length of spring unit (10) from uncompressed length of spring unit (10) to obtain dimension of spring unit compression when operating handle (6) is located in recess.
NOTE : Dimension must be between 0.7 mm and 1.0 mm (0.03 and 0.04 in.).
(g)If compression of spring unit exceeds limits, remove spring unit as described in Para. (3)(c) thru (3)(g).
(h)Add or remove washer (66) on fork end (67) to adjust length of spring unit (10) as described in Para. (3)(m).
(i)Install spring unit (10) as described in Para. (3)(o) thru (3)(s).

(5)Adjustment of Operating Handle
(Ref. Fig. 511)
(a)Pull operating handle (6) downward from recess until stop is reached.
(b)Calculate gap "c" between bellcrank (12) and stop bolt (70) as follows:
1 Measure and record distance between door structure and lower hinge pin (11) of spring unit at each locking unit (1) in unlocked position (distance "X").
2 Manually press locking hook (2) further into unlocked direction until bellcrank (12) contacts stop bolt (70), and hold.
3 Measure and record in this position the distance between door



STATION/FRAME	GAP "C"
STA1472/FR20B THRU STA1711/FR25	MAX 2.5mm(0.098in.)
STA3991/FR60 THRU STA4123/FR62A	MIN 0.6mm(0.024in.)
ONLY STA4150/FR63	MIN 0.1mm(0.004in.)

BM3 52 30 21 5 ATM0 17

Operating Handle of FWD or AFT Cargo Compartment Door
Figure 511

structure and lower hinge pin (11) of spring unit (10) at each locking unit (1) (distance "Z").

4 Calculate gap "C" by subtracting distance "X" from distance "Z" (C=Z-X).

(c)If gap "c" is out of tolerance, proceed as follows:

1 Remove cotter pin (87), castle nut (86) and washer (85) from bolt (84).

2 Disconnect operating handle (6) from door structure by removing cotter pin (83), castle nut (82), washer (81) and bolt (80).

3 Pull operating handle (6) from cargo compartment door and disconnect spring box (5) from operating handle (6) by removing bolt (84).

4 Loosen bolt (72) and nut (73) to release spring sleeve (71).

5 Adjust length of spring box (5) by turning eye-end (74).

NOTE : Lengthening of spring box (5) decreases gap "C" and shortening of spring box (5) increases gap "C".

6 TORQUE nut (73) to between 0.1 and 0.12 m.daN (8.85 and 10.62 lbf.in.) to secure spring box (5).

NOTE : Do not overtighten nut (73); otherweise spring box (5) will be deformed.

7 Connect spring box (5) and operating handle (6) by means of bolt (84), washer (86) and castle nut (86).

8 Position operating handle (6) to cargo compartment door and install bolt (80), washer (81) and castle nut (82).

10 Tighten castle nut (82) and secure with new cotter pin (83).

(d)Recheck gap "C" between bellcrank (12) and stop bolt (70).

(6)Adjustment of Indicator Flag
(Ref. Fig. 512)

(a)Pull operating handle downwards so that indicator flag (90) can be temporarily installed (Ref. 52-30-21, P. 401).

(b)Temporarily install access covers 811AR and 811BR (812AR and 812BR).

(c)Push operating handle (6) upwards into recess until it locks.

(d)Check position of indicator flags (90) relative to outer skin of cargo compartment door at reference point by means of straight edge.

NOTE : Indicator flags (90) must be flush to within 1 mm (0.04 in.).

(e)Pull operating handle (6) downwards from recess and remove access panel 811AR (812AR) and 811BR (812BR).

(f)For adjustment of indicator flag (90) proceed as follows:

1 Remove lockwire (92) and turn threaded bush (93) either in or out of fork end (91) as required.

NOTE : Turning of threaded bush (93) into fork end (91) results in moving indicator flag (90) inward.

2 Repeat Para. (b) thru (d).

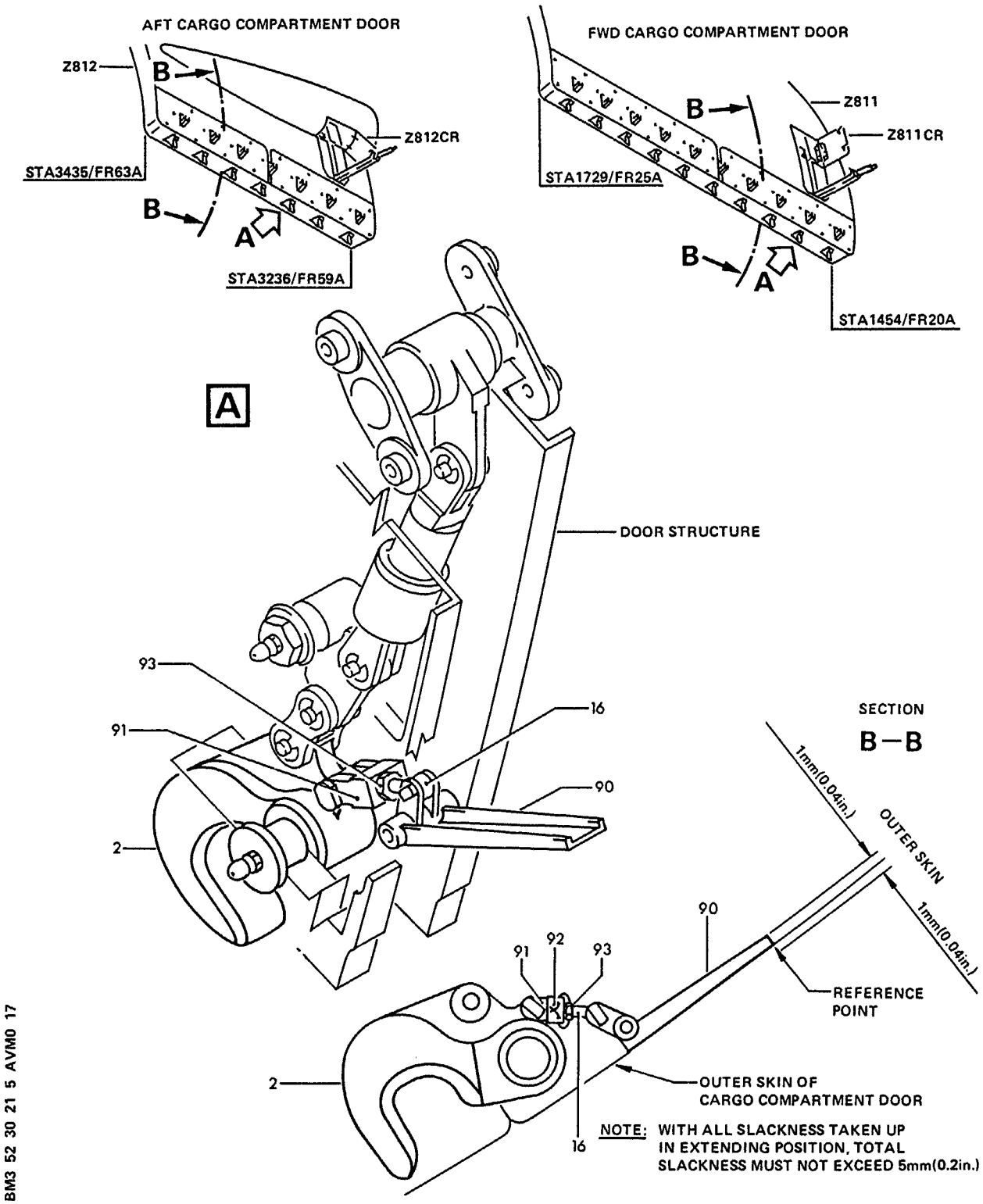
3 Check location of indicator flags (90) with the cut-outs of access panel 811AR and 811BR or 812AR and 812BR.

4 Repeat Para. (e).

(g)After adjustment of indicator flags (90), proceed as follows:

1 Secure fork end (91) and threaded bush (93) with lockwire (92).

2 Apply adhesive compound (Material No. 08-002) to threaded bush (93).



Indicator Flag of FWD or AFT Cargo Compartment Door
Figure 512

C. Test
(1)Remove safety clips and tags and close circuit breakers 7GX and 28GX.
(2)Install indicator flags and rubber stops on each locking unit (1) (Ref. 52-30-21, P. Block 401).
(3)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(4)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(5)Make certain that water drain holes are clean and free from obstructions.
(6)Install access covers 811AR (812AR) and 811BR (812BR).
(7)Check that force required to operate operating handle does not exceed 15 daN (34 lbf.).
(8)Make certain that door actuator safety lock is removed (Ref. 52-30-00, P. Block 301).
(9)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1). Cargo door must close easily and smoothly.
(10)Carry out functional test of cargo compartment doors electrical control system (Ref. 52-35-00, P. Block 501).
(11)Carry out functional test of cargo compartment door warning system (Ref. 52-71-00, P. Block 501).

D. Close-Up
(1)Install access covers 811DR and 811ER or 812DR and 812ER.
(2)Close access panel 811CR or 812CR.
(3)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(4)Remove access platform.

FWD, AFT CARGO DOOR LOCKING MECHANISM - INSPECTION/CHECK

NOTE : For inspection/check procedures of the BULK cargo compartment door refer to chapter 52-34-21, P. Block 601.

NOTE : Should crack formation be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

1. Reason for the Job

A. To monitor the condition of door locking mechanism to make certain that components are free from excessive wear.

NOTE : Item numbers correspond with operations in 3.B.

(1)Visual inspection
(2)Operational check
(3)Measurement of
  (a)Dead center "a"
  (b)Dead center "b"
(4)Checking for locking mechanism wear.
(5)Measurement of fits and clearances.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.6 m (8.5 ft.)
B. 98A52007521000	Jig - FWD and AFT Cargo Compartment Door Locking Mechanism
C. 98A52007522000	Jig - FWD and AFT Cargo Compartment Door Locking Mechanism
D.	Circuit Breaker Safety Clips and Tags
E.	Spring Balance 15 daN (34 lbf.)
F. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-30-21, P. Block 401	FWD, AFT Cargo Door Locking Mechanism
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
R - 52-30-31, P. Block 401	FWD, AFT Cargo Door Latch and Stop Fittings

3. Procedure

A. Job Set-Up

NOTE : Designations in brackets refer to AFT cargo compartment door.

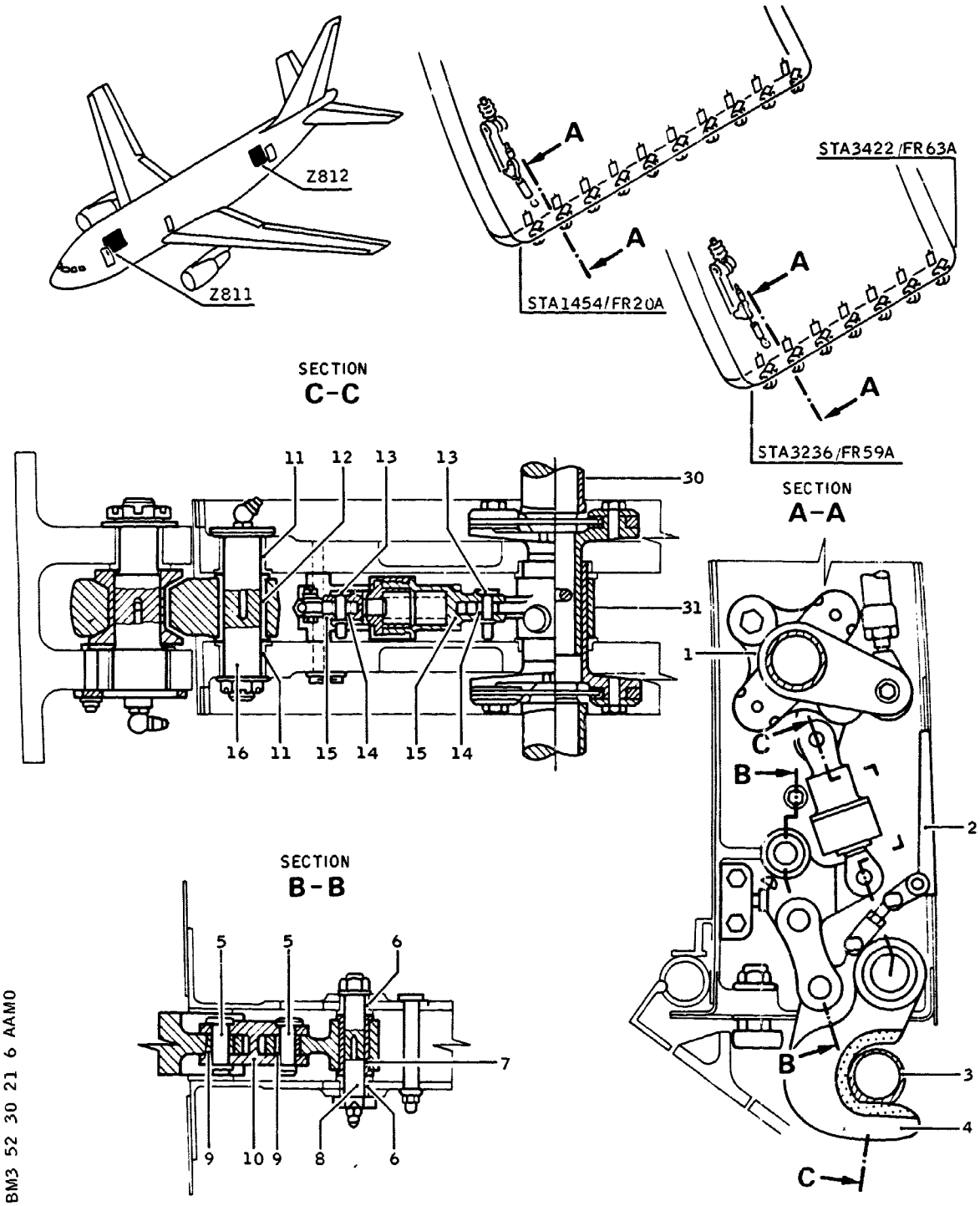
(1)Position access platform.
(2)Remove access covers 811AR (812AR) and 811BR (812BR).
(3)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(4)Make certain that electronics racks ventilation is correct.
(5)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(6)Install door actuator safety lock to FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).
(7)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B5

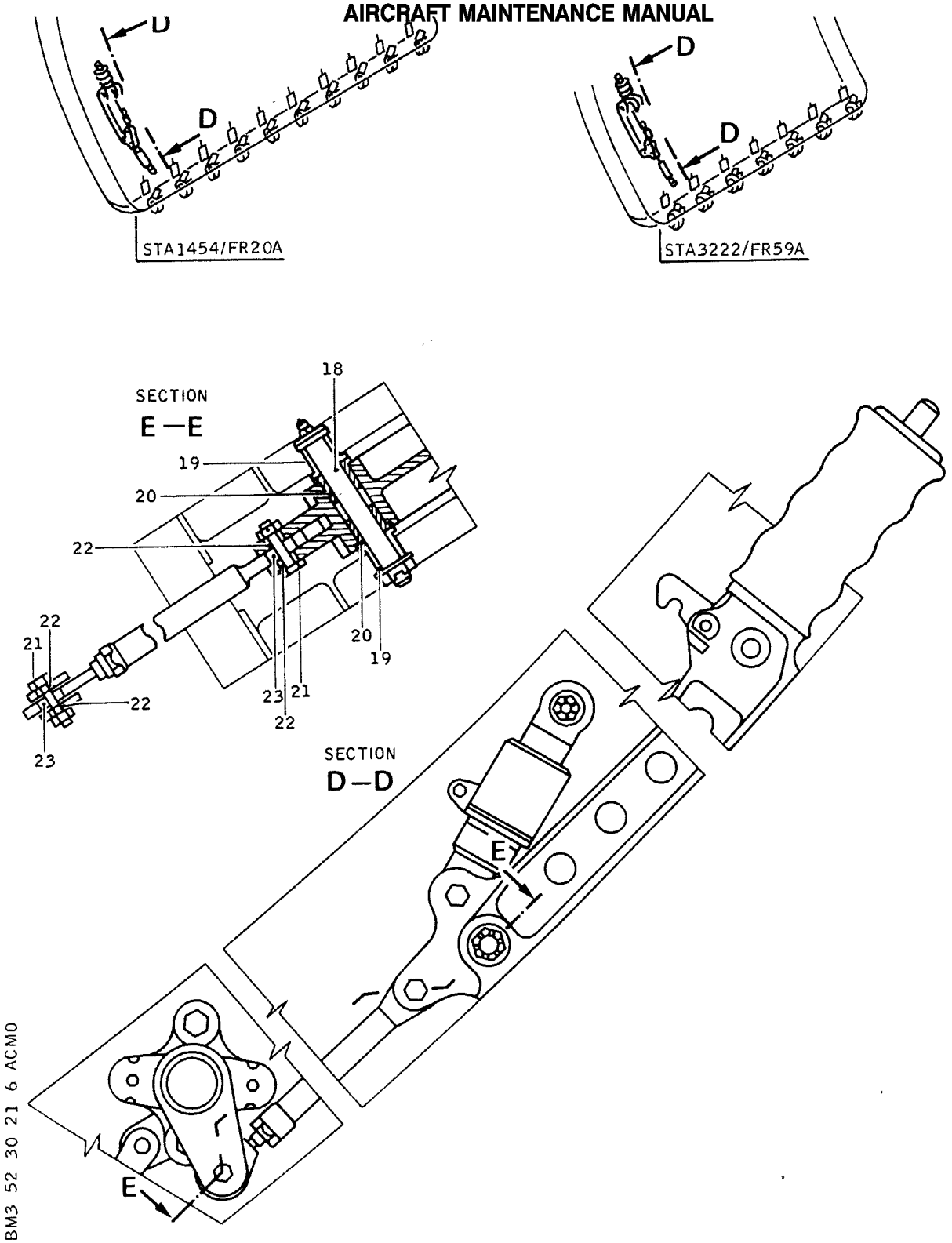
B. Inspection/Check

(1)Visual Inspection
(Ref. Fig. 601)
(Ref. Fig. 602)
(a)Check complete locking mechanism, operating handle assembly and attaching parts for:
1 Corrosion (Ref. 51-74-10, P. Block 801)
NOTE : The maximum permissible depth of corrosion at any point on the torque tubes (30) and bearings (31) must not exceed 0.25 mm (0.0098 in.).
2 Scratches, marks and dents (Ref. 51-73-10, P. Block 801)
3 Satisfactory paint coating (Ref. 51-75-10, P. Block 801)
4 Security of attachment
5 Cracks (especially check flexible disks (1) at torque shaft, cracks are not permissible). (For removal and installation ref. 52-30-21, P. Block 401).
(b)Check inner surface (indicated area) of locking hook (4) for marks.
NOTE : Marks up to a depth of 0.1 mm (0.004 in.) are permissible. Marks of a depth between 0.1 and 0.3 mm (0.004 and 0.012 in.) may be removed in situ.
Marks in excess of this depth necessitate replacement of the hook (Ref. 52-30-21, P. Block 401).
(c)Check bolt (12) for damage free surface.
NOTE : If any damage is found, bolt (12) must be replaced (Ref. 52-30-21, P. Block 401).

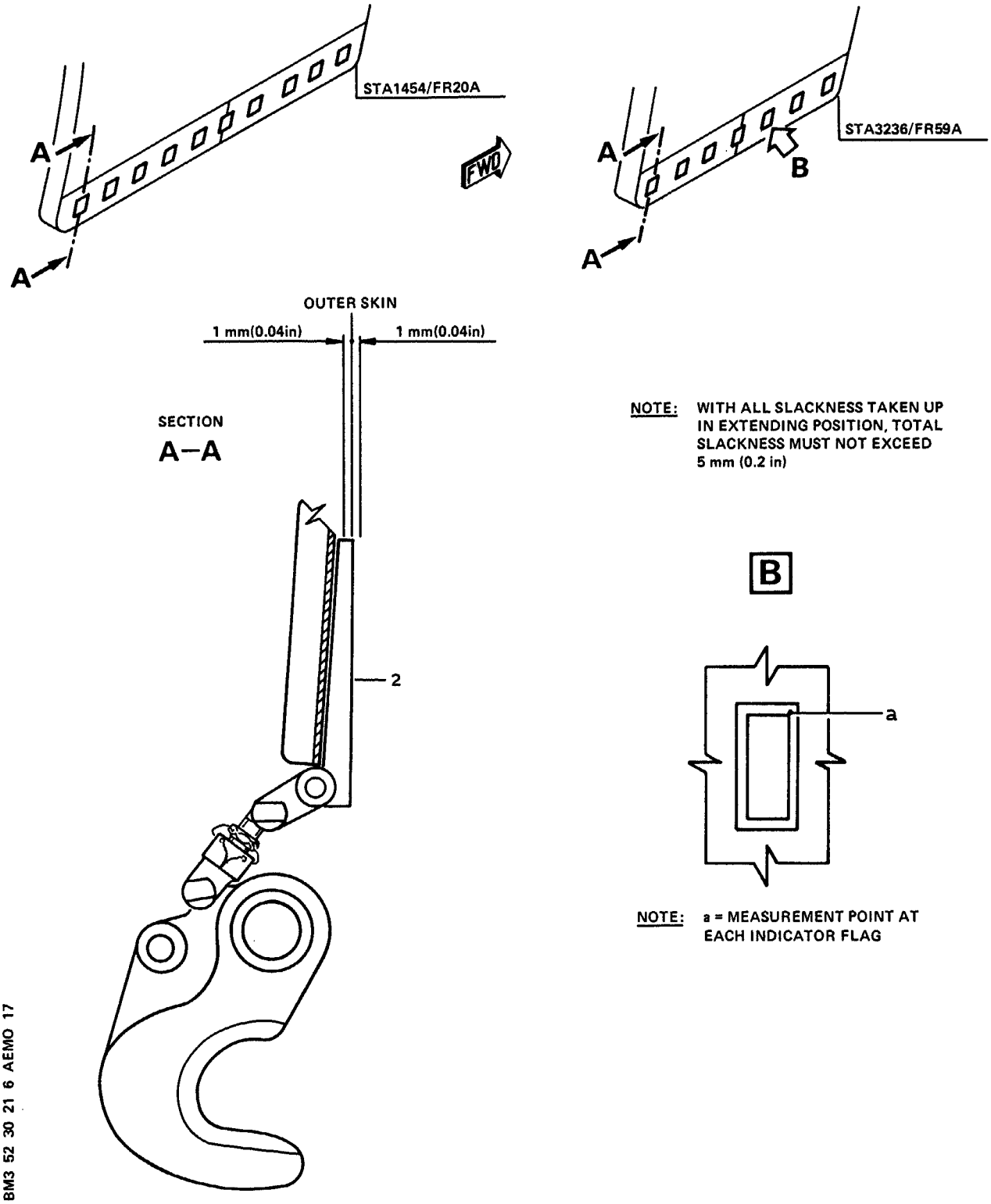
(2)Operational Check
(Ref. Fig. 603)
(a)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(b)Remove the door actuator safety lock and close applicable cargo compartment door (Ref. 52-30-00, P. Block 301) but do not lock.



FWD and AFT Cargo Compartment Doors -
Locking Mechanism
Figure 601



Operating Handle Assembly
Figure 602



FWD and AFT Cargo Compartment Doors -
Indicator Flag
Figure 603

(c)Pull operating handle with spring balance downwards and measure operating force which must not exceed 15 daN (34 lbf.).
(d)If max. operating force is exceeded, check adjustment of locking mechanism (Ref. 52-30-21, P. Block 501).
(e)Push operating handle upwards into the recess and check that indicator flags (2) are flush with outer door skin.
(f)If indicator flags (2) are recessed or protrude by more that 1 mm (0.04 in.), carry out adjustment. Reference point for this adjustment is measurement point "a" (Ref. 52-30-21, P. Block 501).
(g)Press pushbutton on operating handle and pull operating handle downwards from recess. Check that all indicator flags (2) are extended. In fully open position, indicator flags (2) form an angle of approx. 84 degrees with door skin.

(3)Measurement of Dead Centers
(Ref. Fig. 604)
(Ref. Fig. 605)
(a)Dead center "a".
1 Close and lock cargo compartment door (Ref. 52-30-00, P. Block 1).
2 Measure dead center "a" with adjustment jig PN 98A52007522000 at every frame.

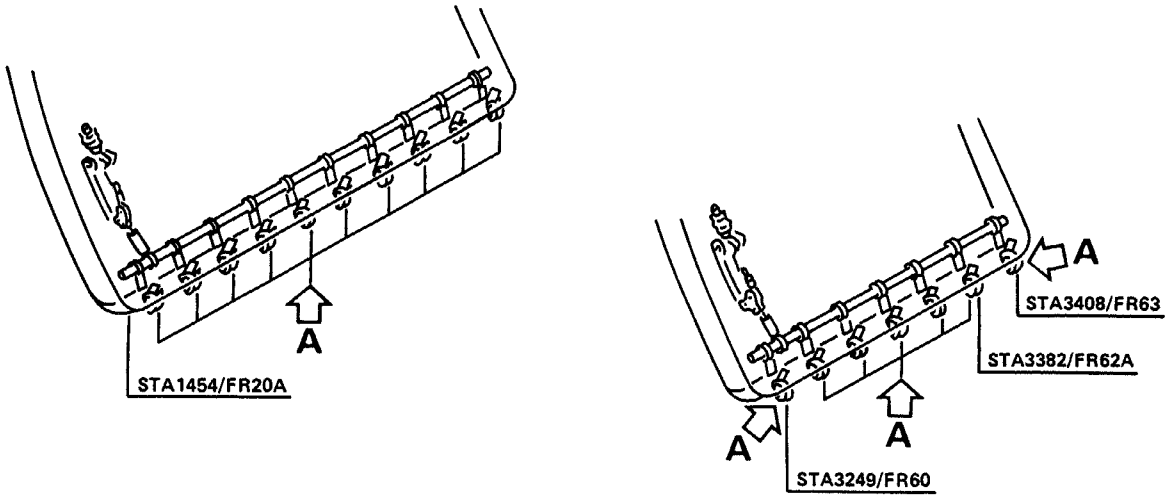
NOTE : For a detailed description of dead center measurement refer to 52-30-21, P. Block 501).

3 If dead centers "a" are out of tolerance, carry out adjustment (Ref. 52-30-21, P. Block 501).
(b)Dead center "b".
CAUTION : IF DEAD CENTERS "b" ARE DIFFERENT FROM FRAME TO FRAME, THE MINIMUM MEASURED DIMENSION MUST NOT BE LESS THAN THE STATED DIMENSIONS.
1 Close and lock cargo compartment door (Ref. 52-30-00, P. Block 1).
2 Measure dead center "b" with adjustment jig PN 98A52007521000 at every frame.

NOTE : For a detailed description of dead center measurement refer to 52-30-21, P. Block 501).

3 If dead centers "b" are out of tolerance, carry out adjustment (Ref. 52-30-21, P. Block 501).

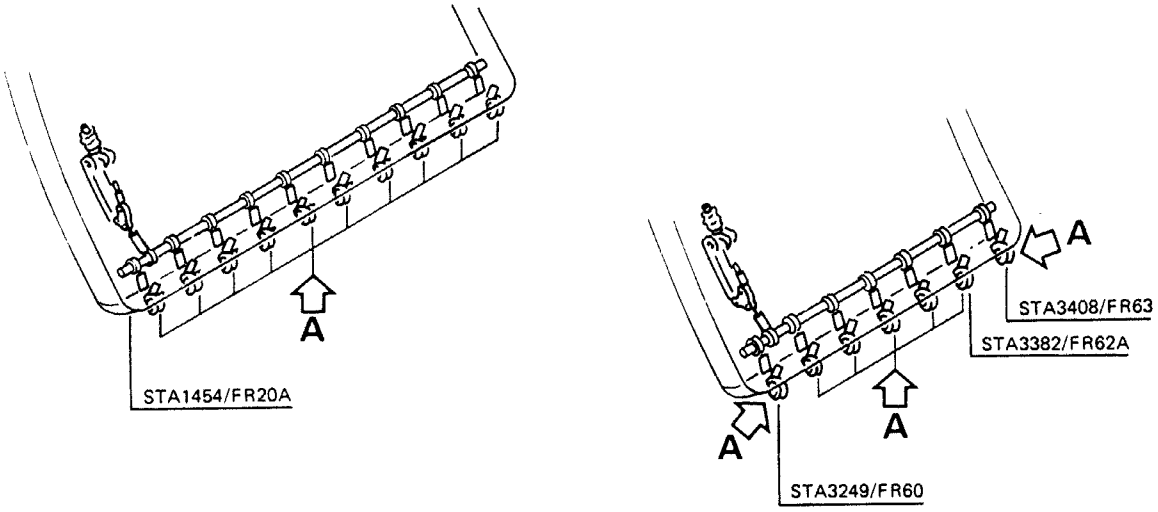
(4)Check of Locking Mechanism Wear
(Ref. Fig. 606)
(Ref. Fig. 607)
(a)Check wear with operating handle in locked position as follows:
1 Open cargo compartment door (Ref. 52-30-00, P. Block 1) until locking hooks (4) are accessible.
2 Push operating handle upwards into the recess.
3 Measure vertical movement at tip of all locking hooks (4).
NOTE : Permissible vertical movement is 1.0 mm (0.04 in). Movement above this figure necessitates check for wear of bolts (5), (8) and (16) and associated bushes. Bolts and bushes not within limits must be replaced (Ref. 52-30-21, P. Block 401).

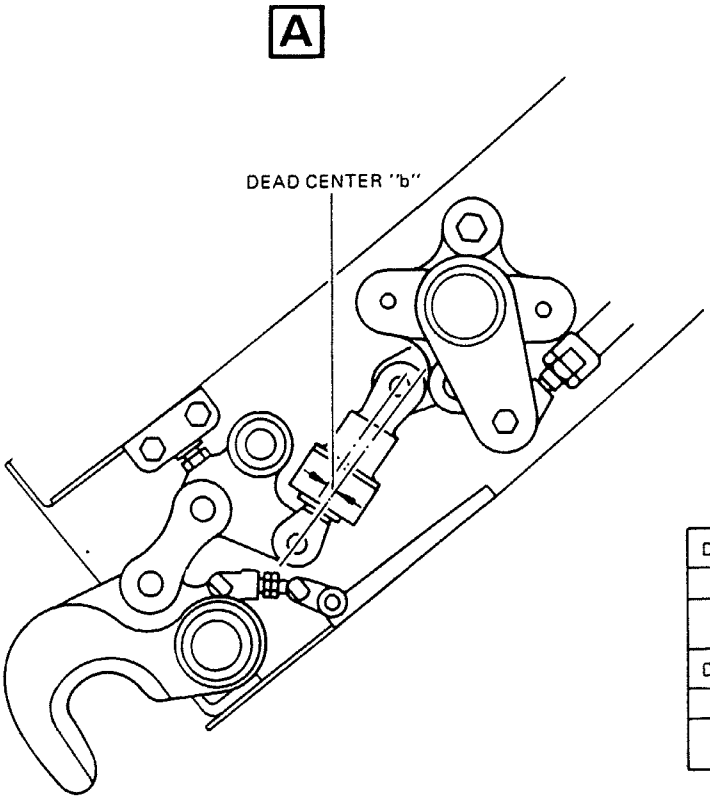


DEAD CENTER "a"	
mm	in.
2+0.1	0.08+0.004
DEAD CENTER "a" AT FR63	
mm	in.
2.7 $^{+0.1}_{-0.3}$	0.106 $^{+0.004}_{-0.012}$

BM3 52 30 21 6 AGM0

FWD and AFT Cargo Compartment Doors -
Dead Center "a"
Figure 604



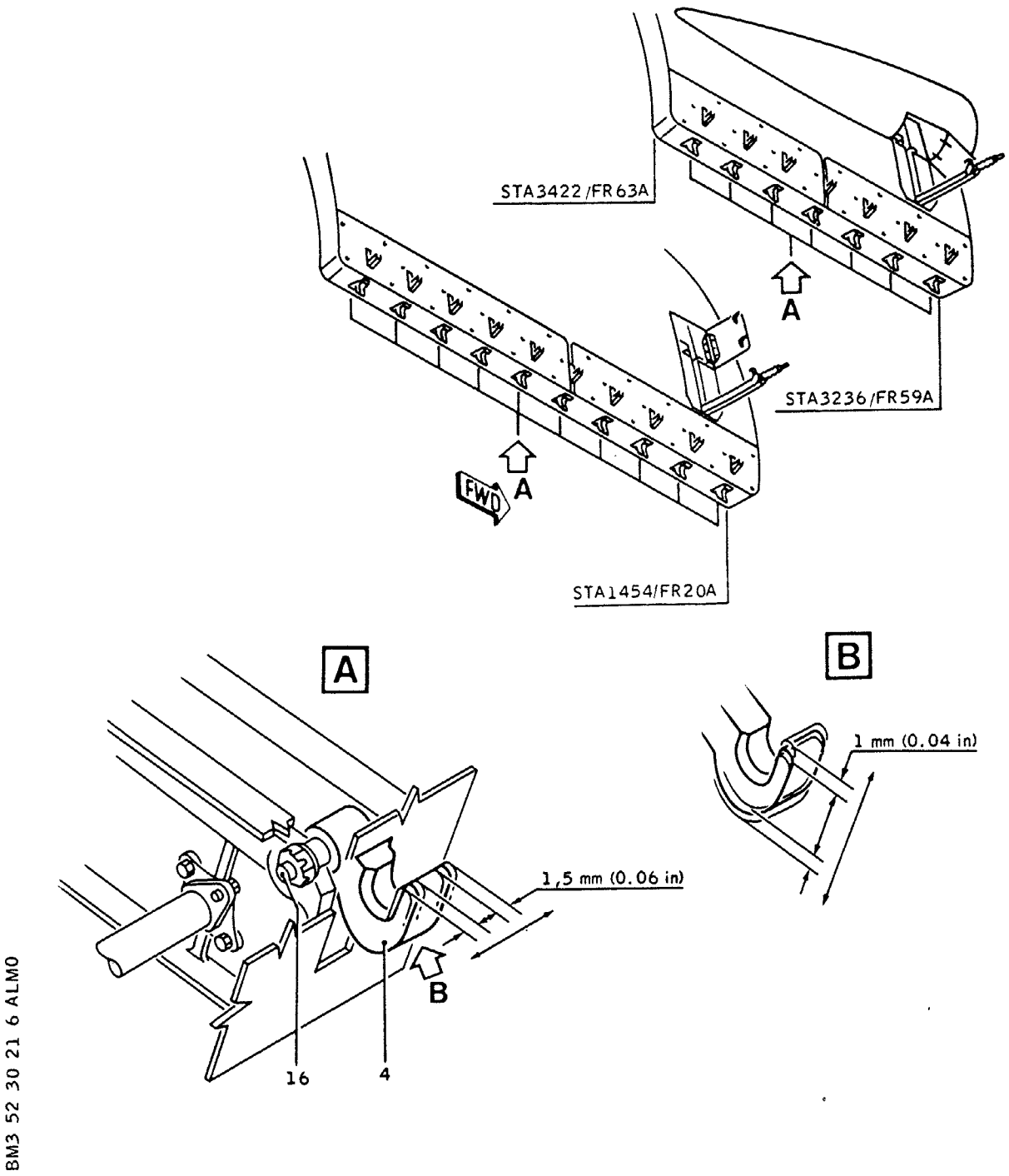


DEAD CENTER "b"	
mm	in
2.7+1.0	0.106+0.04
DEAD CENTER "b" AT FR63	
mm	in
3.8+1.0	0.15+0.04

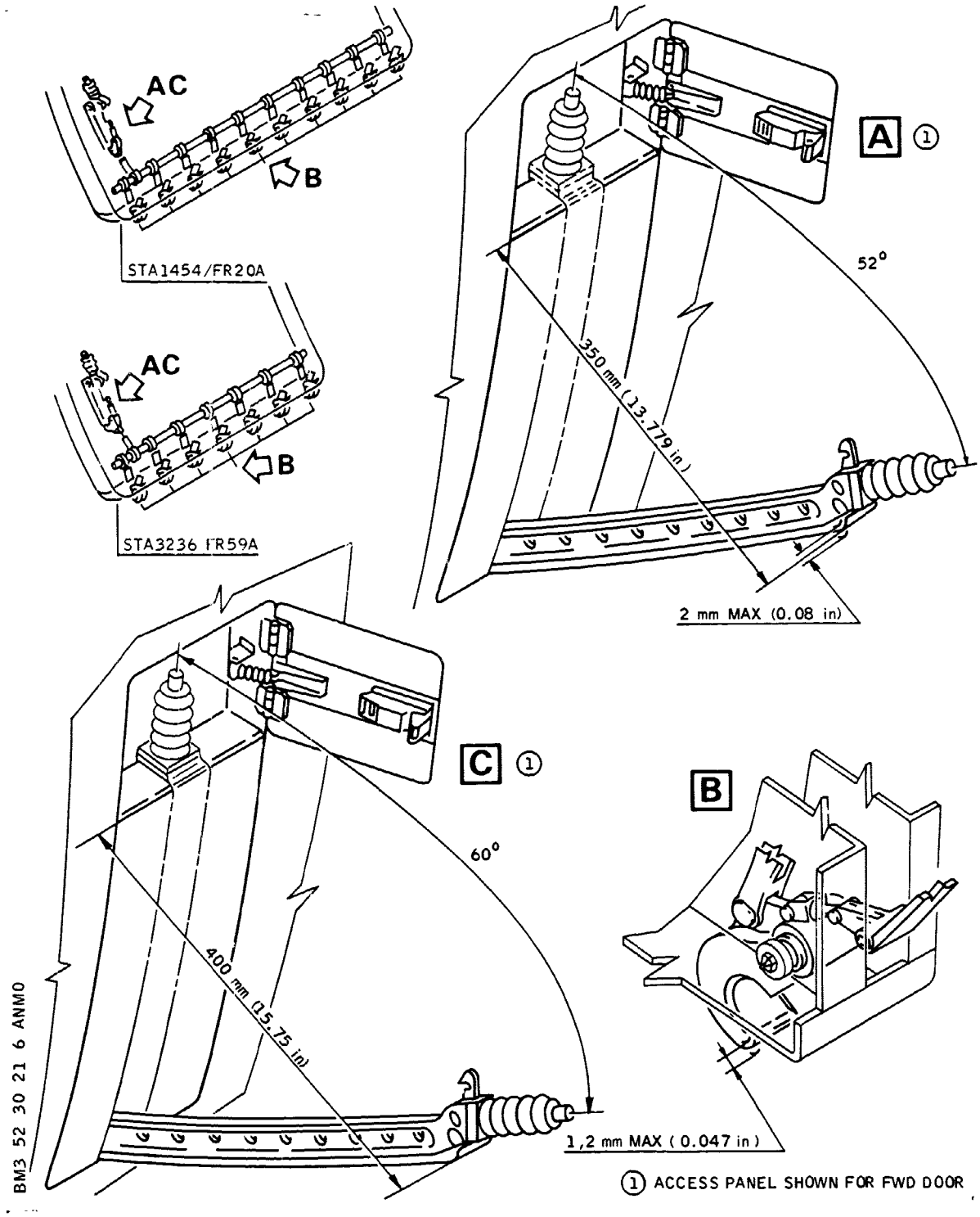
BM6 52 30 21 6 AJMO 01

FWD and AFT Cargo Compartment Doors -
Dead Center "b"
Figure 605

R



Locking Hook
Figure 606



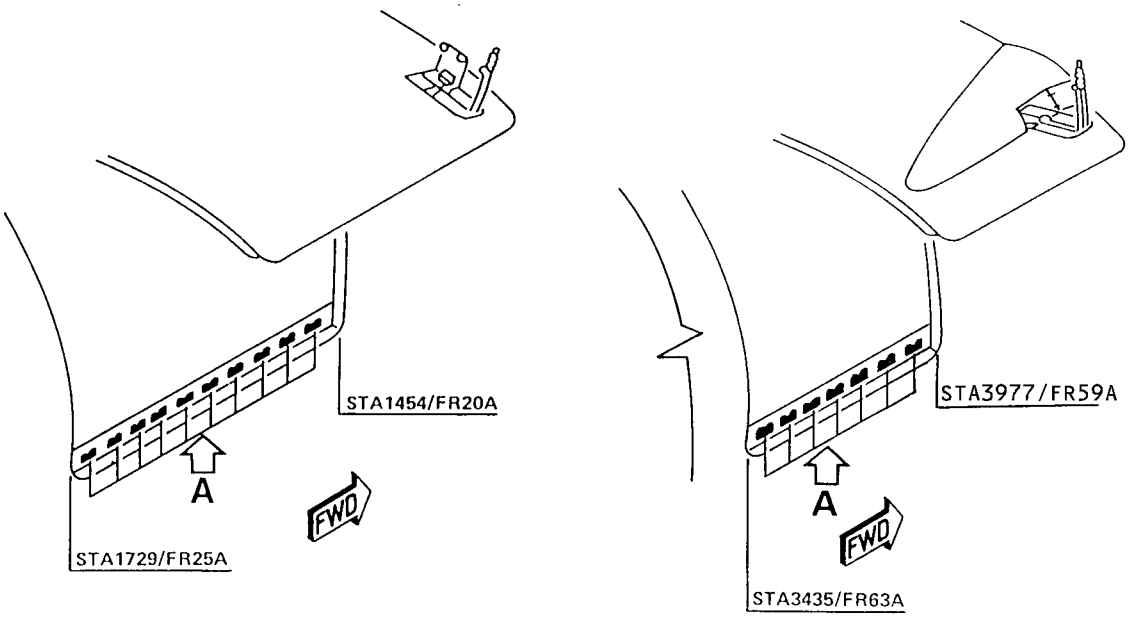
Operating Handle
Figure 607

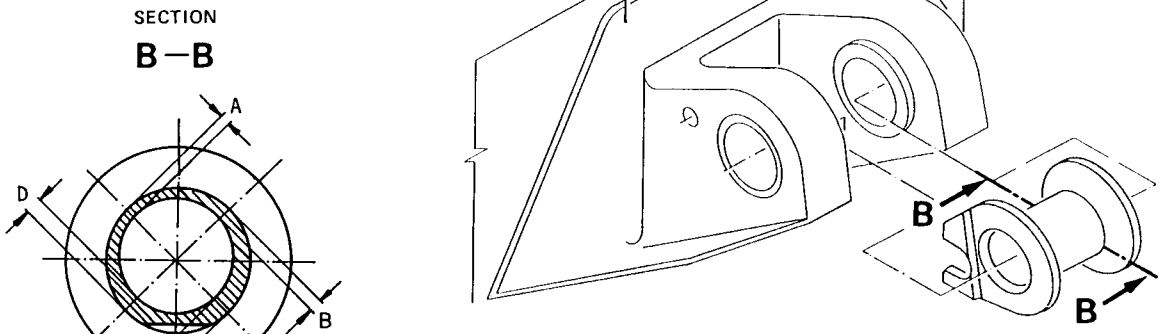
4 Measure horizontal movement at sides of all locking hooks (4).
NOTE : Permissible horizontal movement is 1.5 mm (0.06 in.). Movement above this figure necessitates check for wear of bolt (16) and associated bushes. Bolts and bushes not within limits must be replaced (Ref. 52-30-21, P. Block 401).

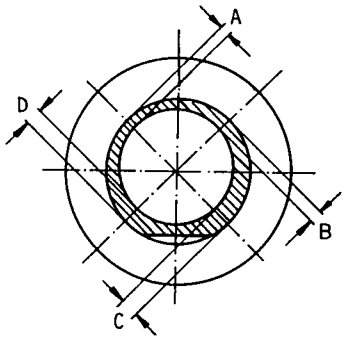
(b)Check wear with operating handle in open position as follows:
1 Open cargo compartment door (Ref. 52-30-00, P. Block 1) until locking hooks (4) are accessible and pull operating handle 60 degrees from recess.
NOTE : A sweep angle of 60 degrees corresponds to dimension 400 mm (15.75 in.).
2 Measure vertical movement at tip of all locking hooks (4).
NOTE : Permissible vertical movement is 1.2 mm (0.047 in.). Movement above this figure necessitates check of bolts (5),(8),(16) and associated bushes for wear. Bolts and bushes not within limits must be replaced (Ref. 52-30-21, P. Block 401).
3 Push operating handle 52 degrees from recess.
NOTE : A sweep angle of 52 degrees corresponds to dimension 350 mm (13.80 in.).
4 Measure vertical movement of operating handle.
NOTE : Permissible vertical movement of operating handle is 2.0 mm (0.08 in.). When measuring the movement, the torque shaft must not be moved. Movement above this figure necessitates check for wear of bolts (21) and associated bearings (23). Bolts (21) and bushes (22) not within limits must be replaced (Ref. 52-30-21, P. Block 401).

(5) Measurement of Wear Limits at Eccentric Bushes
(Ref. Fig. 608)
(a)Remove the eccentric bushes from the door frame fitting (Ref. 52-30-31, P. Block 401).
(b)Measure the thickness of the eccentric bushes.
(c)If the thickness is less than permitted, replace the applicable eccentric bushes.
(d)Install the eccentric bushes on the door frame fitting (Ref. 52-30-31, P. Block 401).
(6)Measurement of Fits and Clearances
Refer to tables following this topic.
NOTE : Removal/Installation of bolts refer to 52-30-21, P. Block 401).

C. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(3)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1).
(4)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(5)Make certain that water drain holes are clean and free from obstructions.







	MIN. DIMENSION
A	1,6mm (0.063in.)
B	1,6mm (0.063in.)
C	2,38mm (0.094in.)
D	2,38mm (0.094in.)

BM6 52 30 21 6 ARMO 00

Measurement of Wear Limits at Eccentric Bushes
Figure 608

R

(6)Install access covers 811AR (812AR) and 811BR (812BR).
(7)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Remove access platform.

Fits and Clearances

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
B-B ID 7	11.000 (0.4331)	11.018 (0.4338)				11.120 (0.4378)	
B-B OD 8	10.966 (0.4317)	10.984 (0.4324)	0.016 (0.0006)	0.052 (0.002)	10.880 (0.4283)		0.24 (0.009)
B-B ID 9	9.000 (0.3543)	9.015 (0.3549)				9.090 (0.3579)	
B-B OD 5	8.980 (0.3535)	8.995 (0.3541)	0.005 (0.0002)	0.035 (0.0014)	8.910 (0.3508)		0.18 (0.007)
B-B ID 10	9.000 (0.3543)	9.015 (0.3549)				9.090 (0.3579)	
B-B OD 5	8.980 (0.3535)	8.995 (0.3541)	0.005 (0.0002)	0.035 (0.0014)	8.910 (0.3508)		0.18 (0.007)
C-C ID 11	20.000 (0.7874)	20.021 (0.7882)				20.140 (0.7929)	
C-C OD 16	19.959 (0.7858)	19.980 (0.7866)	0.020 (0.0008)	0.062 (0.0024)	19.850 (0.7815)		0.29 (0.011)
C-C ID 12	20.000 (0.7874)	20.021 (0.7882)				20.140 (0.7929)	
C-C OD 16	19.959	19.980	0.02 (0.0008)	0.062 (0.0024)	19.850		0.29 (0.011)

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
	(0.7858)	(0.7866)			(0.7815)		

Fits and Clearances

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
C-C ID 14	6.400 (0.2520)	6.415 (0.2526)				6.452 (0.2540)	
C-C			0.013 (0.0005)	0.043 (0.0017)			0.08 (0.0031)
OD 13	6.372 (0.2509)	6.387 (0.2515)			6.372 (0.2509)		
E-E ID 19	12.700 (0.5000)	12.718 (0.5007)				12.767 (0.5026)	
E-E			0.016 (0.0006)	0.052 (0.002)			0.15 (0.0059)
OD 18	12.666 (0.4987)	12.684 (0.4994)			12.617 (0.4967)		
E-E ID 20	12.700 (0.5000)	12.718 (0.5007)				12.767 (0.5026)	
E-E			0.016 (0.0006)	0.052 (0.002)			0.15 (0.0059)
OD 18	12.666 (0.4987)	12.684 (0.4994)			12.617 (0.4967)		
E-E ID 22	6.350 (0.2500)	6.365 (0.2506)				6.411 (0.2524)	
E-E			0.003 (0.0001)	0.046 (0.0018)			0.14 (0.005)
OD 21	6.319 (0.2488)	6.347 (0.2499)			6.273 (0.2469)		
E-E ID 23	6.337 (0.2495)	6.350 (0.2500)				6.389 (0.2515)	
E-E			0.010 (0.0004)	0.031 (0.0012)			0.12 (0.0047)
OD 21	6.319 (0.2488)	6.347 (0.2499)			6.273 (0.2469)		

FWD, AFT CARGO DOORS LATCH AND STOP FITTINGS - REMOVAL/INSTALLATION

NOTE : For removal/installation of BULK cargo compartment door components refer to 52-34-31, P. Block 401.

1. Reason for the Job

To replace the following components:

A. Stop bolts at FWD or AFT cargo compartment door.
B. Eccentric bolts, eccentric bushes and serrated plates in door frame area of fuselage.
C. Stop angle plates at AFT cargo compartment door only.

2. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 2.7 to 3.0 m (9 to 10 ft.)
R	B.	Circuit Breaker Safety Clips and Tags
R	C.	Tab Washer
R	D.	Cotter Pin
R	E. Material No. 04-004	Common Greases (Ref. 20-31-00)
R	F. Material No. 05-002	Special Materials (Ref. 20-31-00)
R	G. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-31-11, P. Block 501	FWD Cargo Compartment Door
- 52-32-11, P. Block 501	AFT Cargo Compartment Door

3. Procedure

A. Job Set-Up

NOTE : Designations in brackets refer to AFT cargo compartment door.

(1)Position access platform.
(2)Remove access covers 811AR and 811BR (812AR and 812BR) from FWD (AFT) cargo compartment door.
(3)Remove access covers 134BR thru 134FR (154AR thru 154CR) from under door area of fuselage.
(4)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(5)Make certain that electronics racks ventilation is correct.
(6)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(7)Install door actuator safety lock to FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).
(8)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B5

B. Removal

(1)Stop Bolt

(Ref. Fig. 401)

(a)Release tab washer (2) securing stop bolt (3).

(b)Remove nut (1) from inside of cargo door structure.

(c)Remove stop bolt (3) and tab washer (2) from cargo compartment door.

(2)Eccentric Bolts, Serrated Plates and Eccentric Bushes on FWD Door Frame

(Ref. Fig. 402)

(a)Remove cotter pin (13), castle nut (12) and washer (11) from eccentric bolt (9). Discard cotter pin.

R (b)Remove cotter pins (5), castle nuts (6), washers (7), special bolt (10)
R and bolt (15). Discard cotter pins.

(c)Support eccentric bush (14) and withdraw eccentric bolt (9) together with serrated plate (8) from door frame fitting.

(d)Remove eccentric bush (14) and disconnect serrated plate (8) from eccentric bolt (9).

(3)Eccentric Bolts, Serrated Plates and Eccentric Bush on AFT Door Frame

(Ref. Fig. 403)

(a)Remove cotter pin (13), castle nut (12) and washer (11) from eccentric bolt (9). Discard cotter pin.

R (b)Remove cotter pin (5), castle nuts (6), washers (7) and special
R bolts (10).

(c)Support eccentric bush (14) and withdraw eccentric bolt (9) together with serrated plate (8) from door frame fitting.

(d)Remove eccentric bush (14) and disconnect serrated plate (8) from eccentric bolt (9).

(e)If necessary, remove cotter pin (19), castle nut (18), washer (17) and mounting bolt (16) from door frame fitting.

(4)Stop Angle Plates at AFT Cargo Compartment Door

(Ref. Fig. 404)

(a)Remove screws (20) attaching stop angle plate (19) to cargo door side.

(b)Loosen insulation mat (Ref. 52-30-13, P. Block 401) to gain access to nuts (21) installed inside of cargo door structure.

(c)Remove nuts (21) and screws (18) mounting stop angle plate (19) on outer skin of cargo compartment door.

(d)Remove stop angle plate (19) and shim (22) from cargo compartment door.

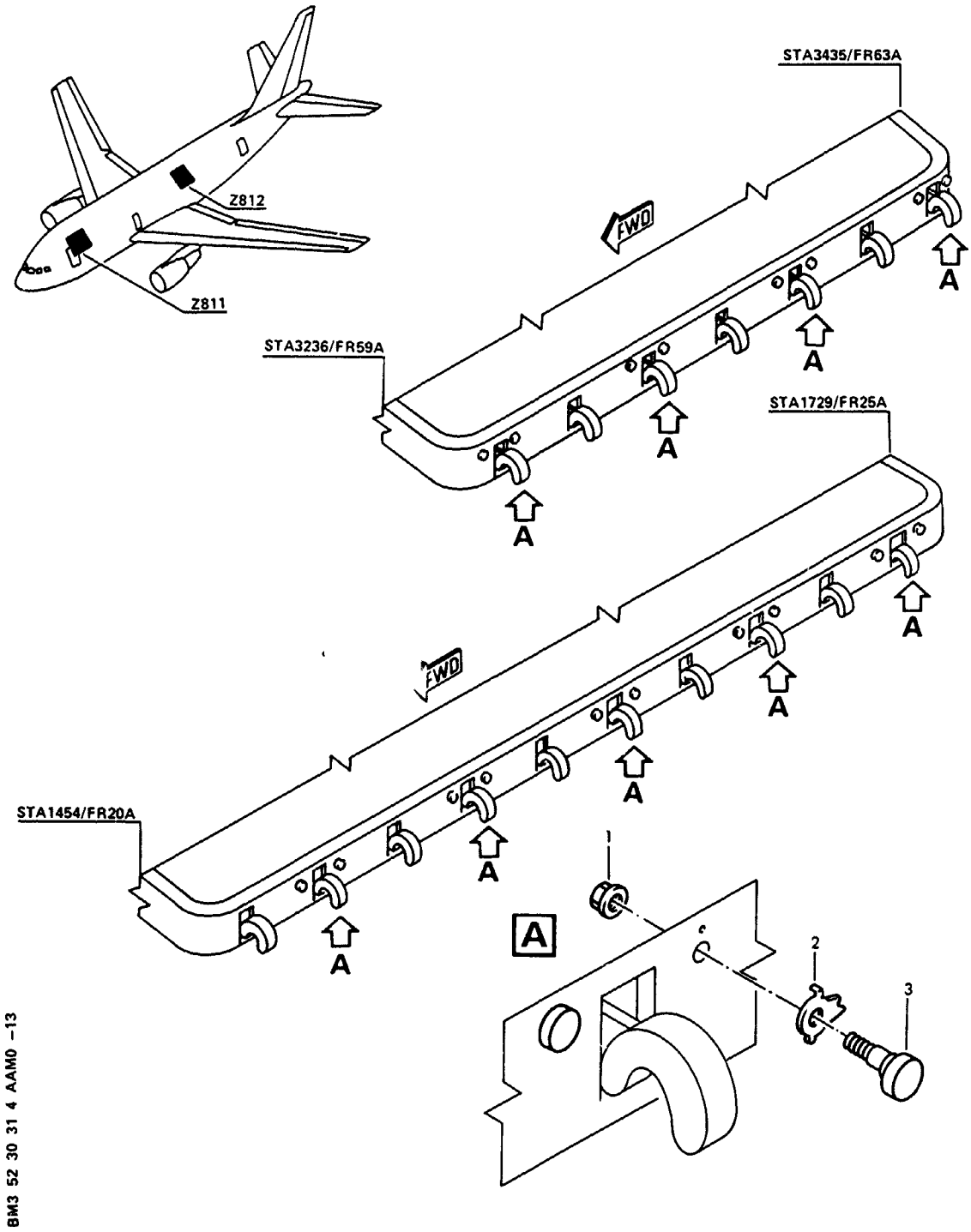
C. Installation

(1)Stop Bolts at FWD and AFT Cargo Compartment Door

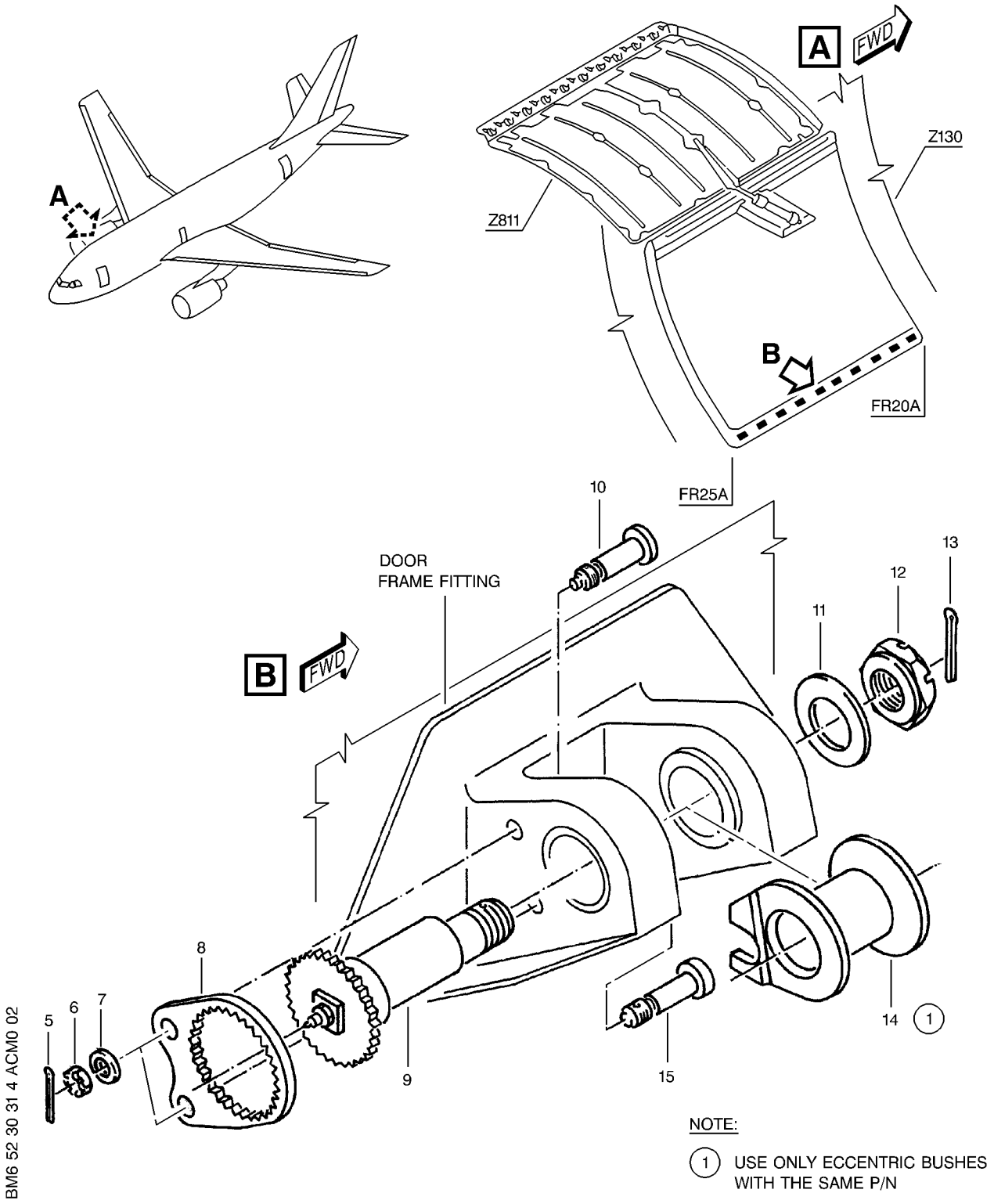
(a)Position new tab washer (2) on stop bolt (3) and insert both parts downwards on cargo compartment door.

(b)Install nut (1) on stop bolt (3) and adjust stop bolt (3) correctly (Ref. 52-31-11, P. Block 501 and 52-32-11, P. Block 501).

(c)Tighten nut (1) and secure with tab washer (2).

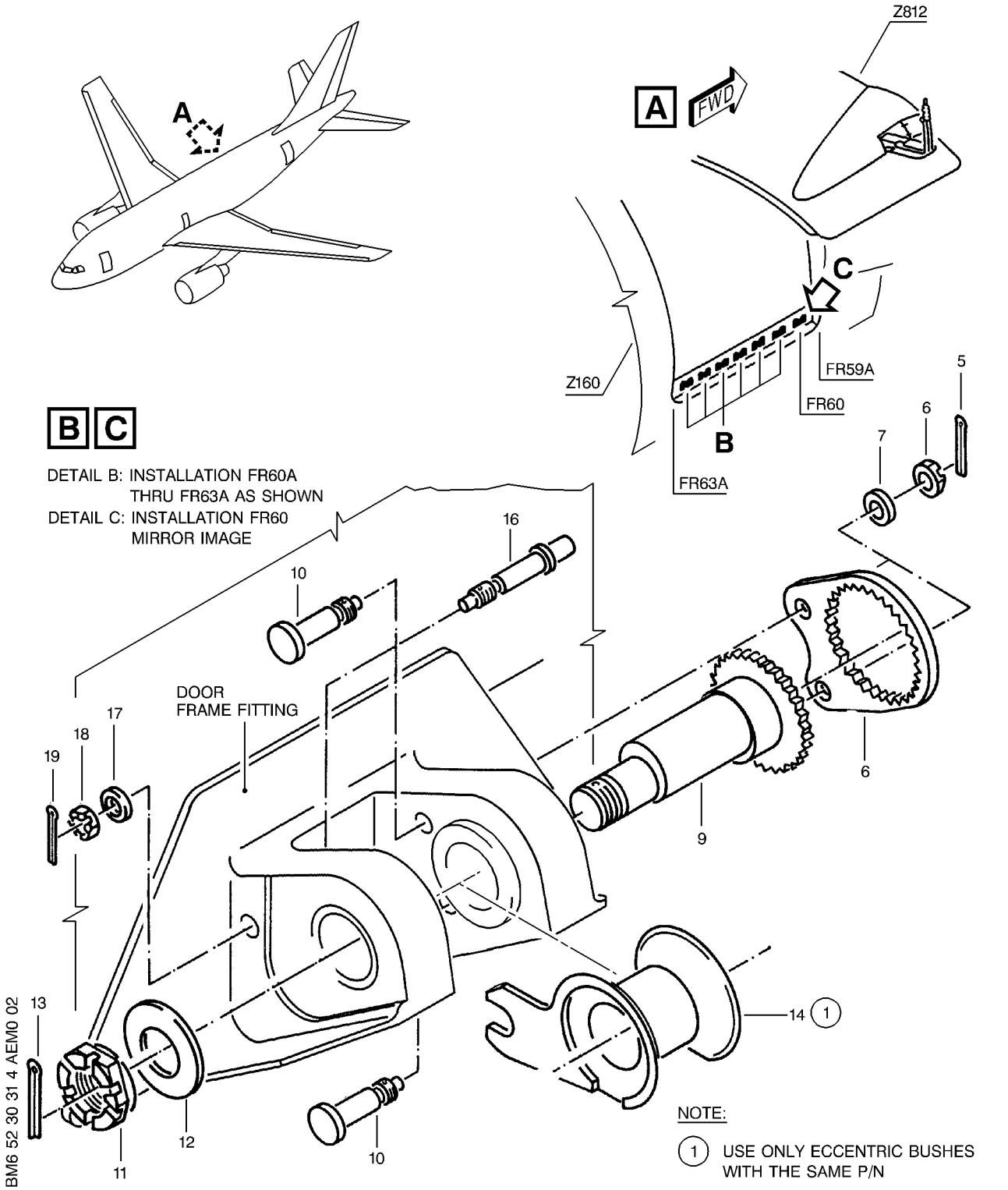


Stop Bolts
Figure 401



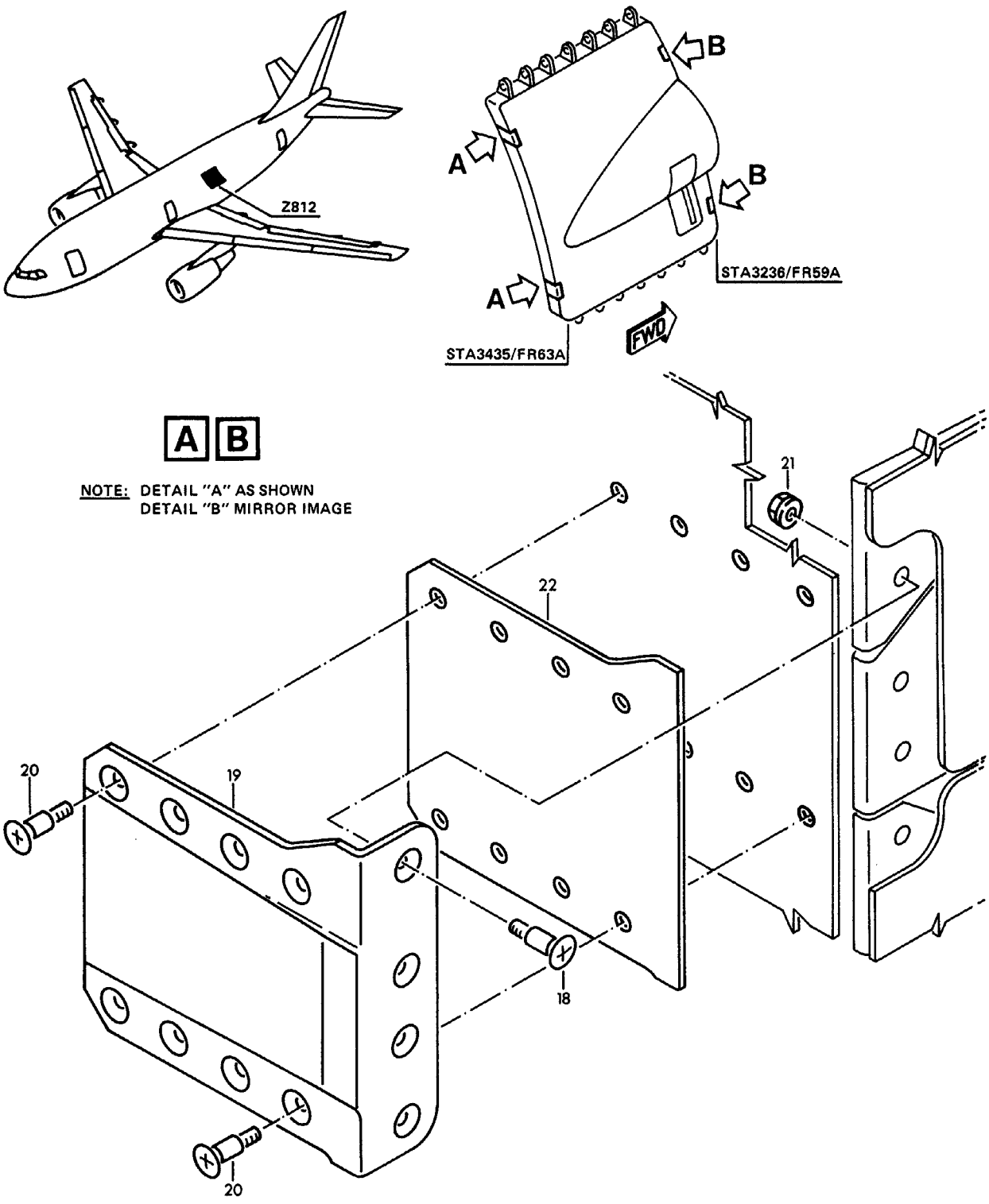
Eccentric Bolts, Serrated Plates and Eccentric Bushes
on FWD Cargo Compartment Door
Figure 402

R



Eccentric Bolts, Serrated Plates and Eccentric Bushes
on AFT Cargo Compartment Door
Figure 403

R



AFT Cargo Compartment Door - Stop Angle Plate
Figure 404

(2)Eccentric Bolts, Serrated Plates and Eccentric Bushes an FWD Door Frame

R CAUTION : IF AN ECCENTRIC BUSH MUST BE REPLACED, MAKE SURE THAT THEY ALL
R HAVE THE SAME PART NUMBER. IF THEY DO NOT HAVE THE SAME PART
R NUMBER, FATIGUE DAMAGE TO THE LOCKING HOOKS CAN OCCUR.

(a)Coat eccentric bolt with grease and pump grease (Material No. 04-004) through grease nipple of eccentric bolt (9) to make certain that grease channel of eccentric bolt is not obstructed.
(b)Insert bolt (15) and special bolt (10) on door frame fitting.
(c)Position eccentric bush (14) to door frame fitting and insert eccentric bolt (9) in door frame fitting.

NOTE : Make sure that slot of the eccentric bush (14) engages with head of bolt (15).

(d)Install washer (11) and castle nut (12) on eccentric bolt (9), but do not tighten at this stage.
(e)Adjust eccentric bolt (9) and eccentric bush (14) (Ref. 52-31-11, P. Block 501).
(f)Position serrated plate (8) to eccentric bolt (9) and install washers (7) and castle nuts (6) on bolts (10) (15).
(g)TORQUE castle nuts (6) to between 0.15 and 0.17 m.daN (13.28 and 15.05 lbs.in.).
(h)Make sure that the castle nut (12) is torqued to 0.49 m.daN (43.37 lbs.in.) and secured with cotter pin (13).
(i)Lubricate eccentric bolt (9) with grease (Material No. 04-004).

(3)Eccentric Bolts, Serrated Plates and Eccentric Bushes on AFT Door Frame
(a)Coat eccentric bolt with grease and pump grease (Material No. 04-004) through grease nipple of eccentric bolt (9) to make certain that grease channel of eccentric bolt is not obstructed.
(b)Insert bolt (15), special bolt (10) and if removed, mounting bolt (16) on door frame fitting.
(c)Position eccentric bush (14) to door frame fitting and insert eccentric bolt (9) in door frame fitting.

NOTE : Make sure that slot of eccentric bush (14) engages with mounting bolt (16).

(d)Install washer (11) and castle nut (12) on eccentric bolt (9), but do not tighten at this stage.
(e)If removed, install mounting bolt (16) on door frame fitting and attach it with washer (17) and castle nut (18).
(f)TORQUE castle nut (18) to between 0.15 and 0.17 m.daN (13.28 and 15.05 lbs.in.) and secure with cotter pin (19).
(g)Adjust eccentric bolt (9) and eccentric bush (14) (Ref. 52-32-11, P. Block 501).
(h)Position serrated plate (8) to eccentric bolt (9) and install washers (7) and castle nuts (6) on special bolts (10).
(i)TORQUE castle nuts (6) and special bolts (10) to between 0.15 and 0.17 m.daN (13.28 and 15.05 lbs.in.) and tool PN 98A52208001100

from tool set PN 98A52208001000.
(j)Make sure that the castle nut (12) is torqued to 0.49 m.daN (43.37 lbs. in.) and secured with cotter pin (13).
(k)Lubricate eccentric bolt (9) with grease (Material No. 04-004).
(4)Stop Angle Plates at AFT Cargo Compartment Door
(a)Position stop angle plate (19) together with related with shim (22) lateral to cargo compartment door and mount with screws (20).
(b)Install screws (18) and nuts (21) in front of step angle plate (19).
(c)Adjust stop angle plate (19) correctly (Ref. 52-32-11, P. Block 501).
(d)Attach insulation mat on cargo compartment door correctly (Ref. 52-30-00, P. Block 401).

D. Close-Up
(1)Coat all threaded ends of bolts with special material (Material No. 05-002).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Spray all components that have been removed/installed or handled during operations with protective film (Material No. 05-027).
(4)Install access cover 811AR (812AR) and 811BR (812BR).
(5)Install access covers 134BR thru 134FR (154AR thru 154CR) to fuselage under door area.
(6)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(7)Remove door actuator safety lock from FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).
(8)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1).
(9)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(10)Remove access platform.

1. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 2.7 m (9 ft.)
	B.	Crane (door weight approx. 190 kg (425 lb.))
	C. 98A52307529001	Sling - FWD and AFT Cargo Compartment Doors
R	D. 98A52208001001	R/I Tools - Cargo Compartment Doors
	E.	Circuit Breaker Safety Clips and Tags
	F.	Torque Wrench, 0 to 2.0 m.daN (0 to 177 lbf.in.)
	G.	Measuring Instruments
	H.	Blanking Caps
	I.	Container for Hydraulic Fluid
	J.	Cotter Pin
	K. Material No. 04-004	Common Greases (Ref. 20-31-00)
	L. Material No. 04-012	Common Greases (Ref. 20-31-00)
	M. Material No. 05-002	Special Materials (Ref. 20-31-00)
	N. Material No. 05-027	Special Materials (Ref. 20-31-00)
	O. Material No. 05-052	Special Materials (Ref. 20-31-00)
	P. Material No. 07-001	Lacquers (Ref. 20-31-00)
	Q. Material No. 16-001	Structure Paints (Ref. 20-31-00)
	R. Material No. 16-002	Structure Paints (Ref. 20-31-00)

Referenced Procedures

	- 11-20-00, P. Block 1	Exterior Placards and Markings
	- 20-28-11, P. Block 1	Electrical Bonding
	- 24-41-00, P. Block 301	AC External Power Control
	- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
	- 52-30-00, P. Block 1	Cargo Compartment Doors
	- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
	- 52-31-11, P. Block 501	FWD Cargo Compartment Door
	- 52-33-00, P. Block 301	Cargo Compartment Door Hydraulic System
	- 52-35-00, P. Block 501	Cargo Compartment Doors Electrical Control System
	- 52-71-11, P. Block 501	Door Warning Switches

2. Procedure

A. Job Set-Up
(Ref. Fig. 401)
(1)Position access platform.
(2)Remove upper access covers 132AR thru 132LR and lower access covers 134BR thru 134FR of cargo compartment door area.
(3)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(4)Make certain that electronics racks ventilation is correct.
(5)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(6)Position cargo door sling (1) PN 98A52307529001 to crane.
(7)Peel-off self-adhesive patches (5) (Material No. 05-052) and remove hoisting lugs (3) from hoist fittings (4). Re-install hoisting lugs (3) in reverse position (eyes outwards).
(8)Attach cargo door sling (1) with fasteners (2) to hoisting lugs (3) and lift cargo compartment door sufficiently to take load off hinge arms.
(9)Depressurize YELLOW hydraulic system (Ref. 29-24-00, P. Block 301).
(10)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B07

(11)Remove panel 132AC to gain access to cargo compartment ceiling terminal block 4004VT located on seat track near crossbeam STA1499/FR21.

B. Removal

**ON A/C 001-003,

(Ref. Fig. 402)

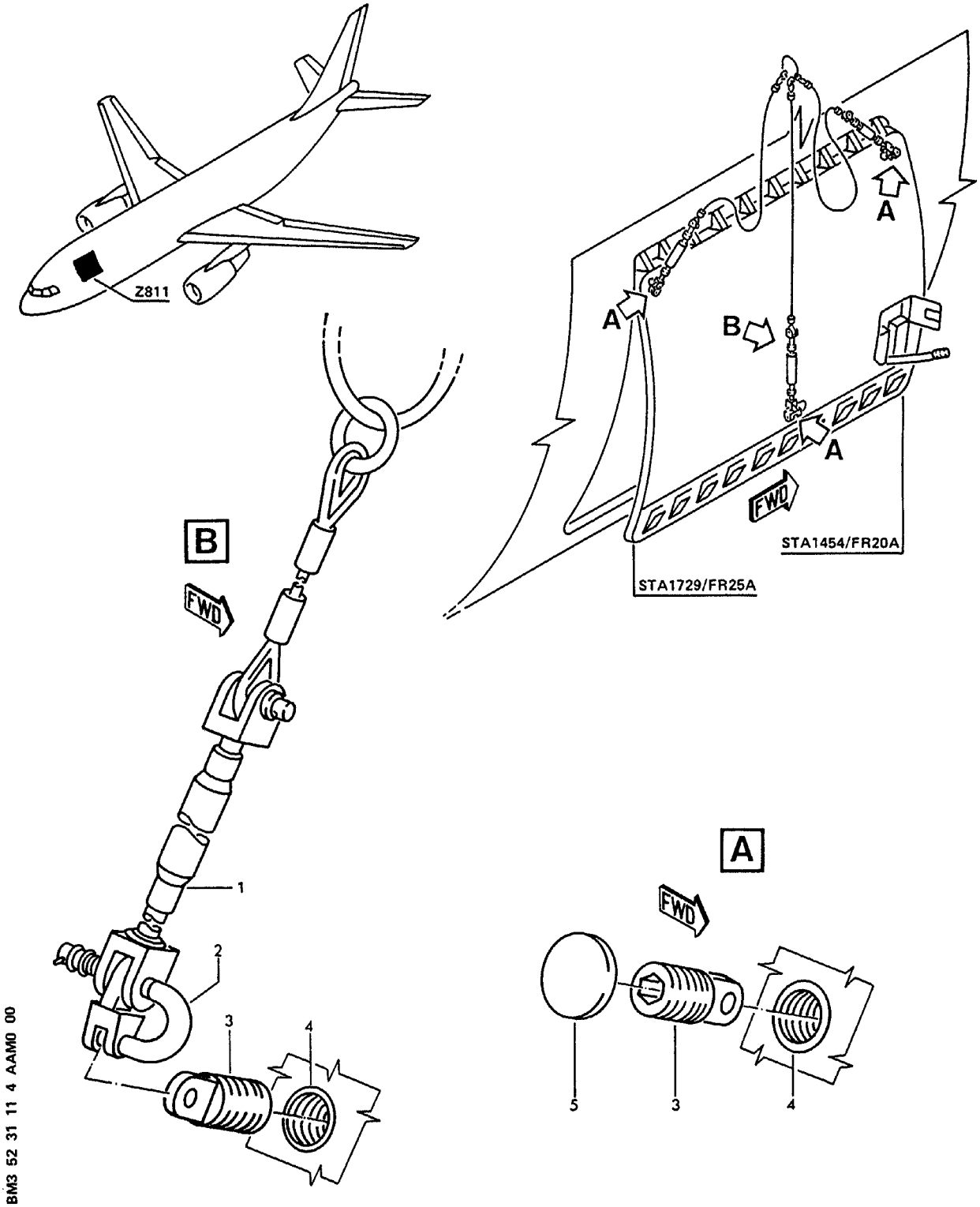
R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

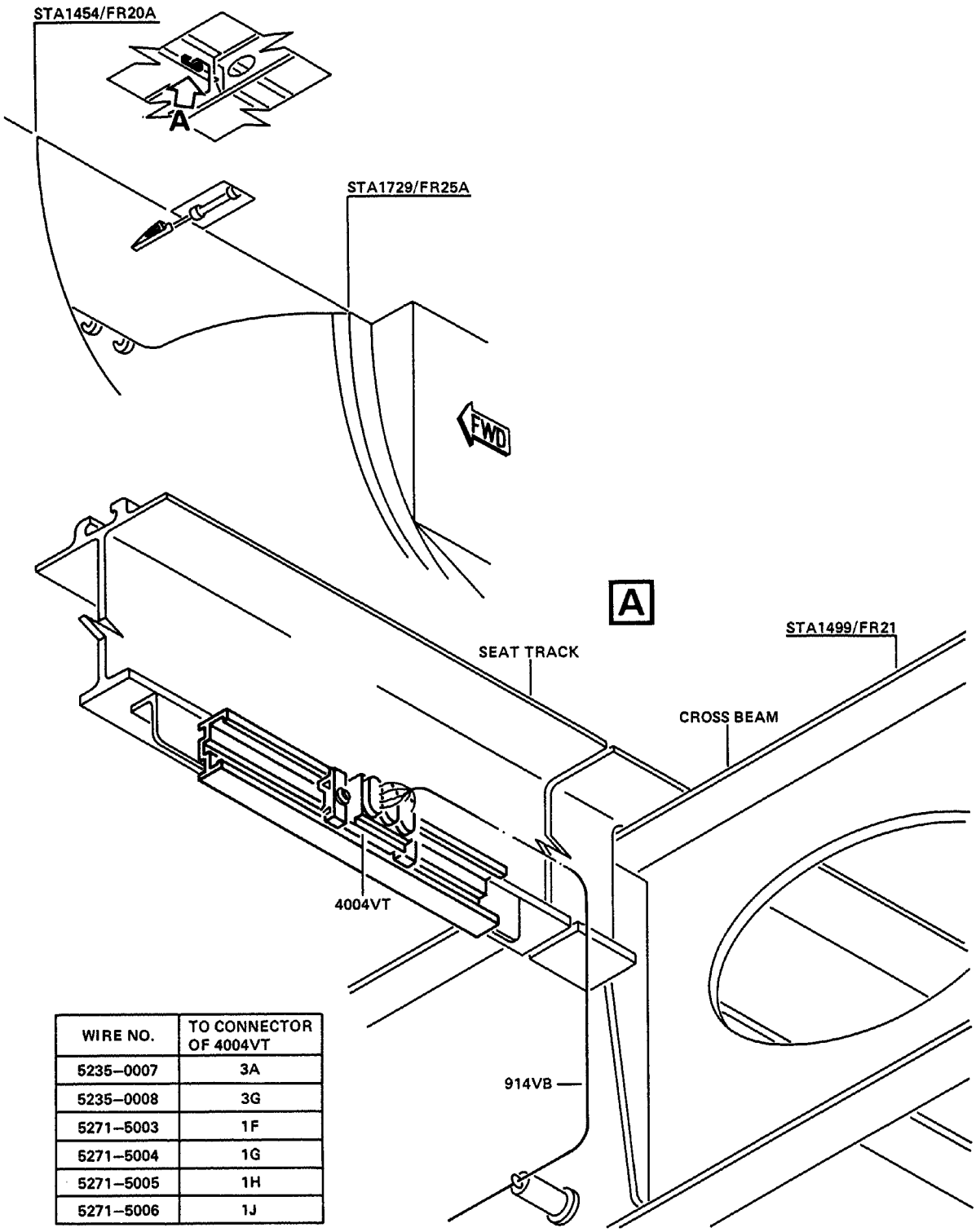
(Ref. Fig. 403)

**ON A/C ALL

(Ref. Fig. 404)
(Ref. Fig. 405)
(Ref. Fig. 406)
(1)Disconnect electrical cables of wire harness 914VB from terminal block 4004VT.
(2)Cut tie-wraps of cable clamps and remove wire harness 914VB from crossbeam area.
(3)Remove connection between door actuator (24) actuator attachment



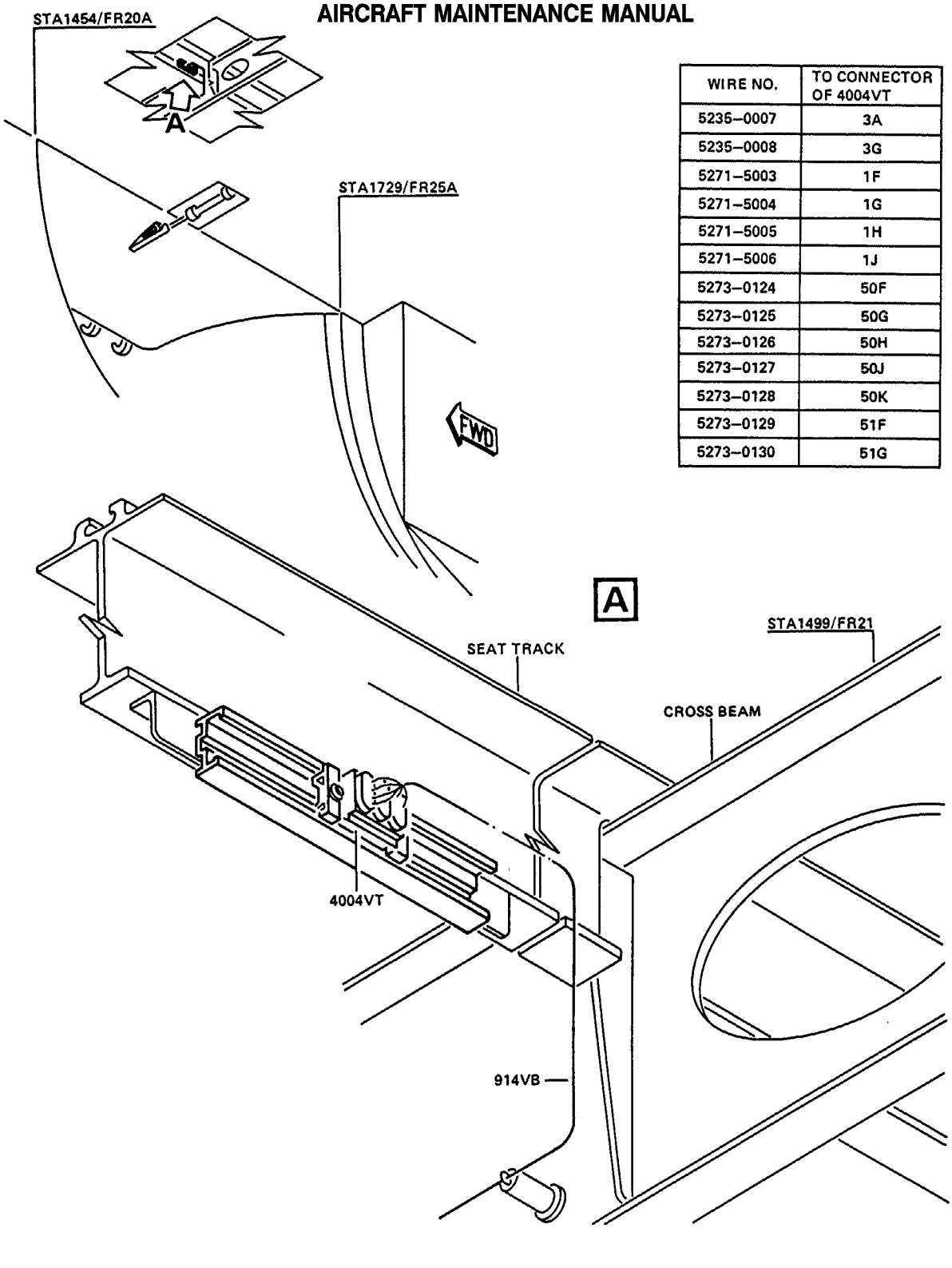
Cargo Door Sling Connection
Figure 401



WIRE NO.	TO CONNECTOR OF 4004VT
5235–0007	3A
5235–0008	3G
5271–5003	1F
5271–5004	1G
5271–5005	1H
5271–5006	1J

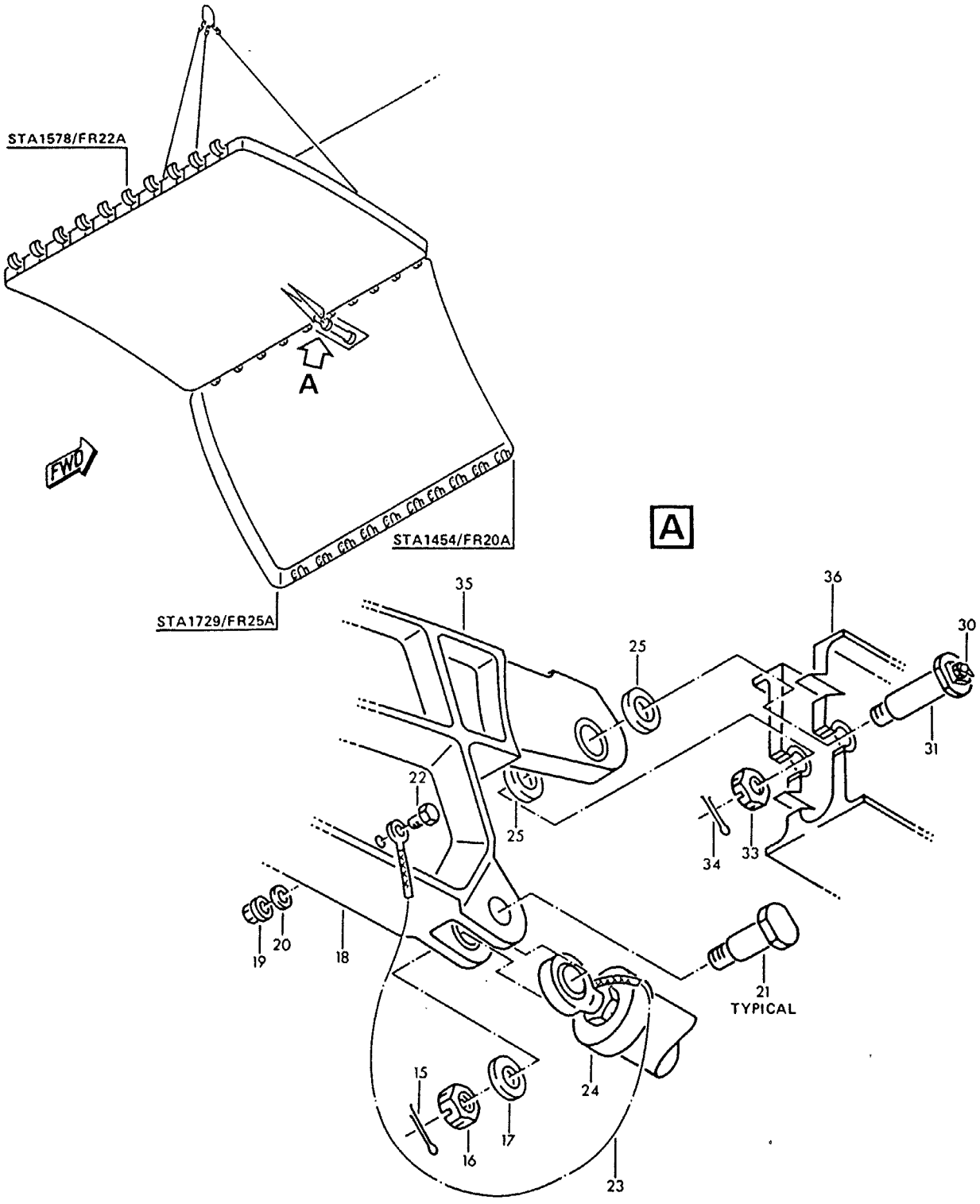
BM3 52 31 11 4 ACM0 00

Removal/Installation of Wire Harness 914VB
Figure 402

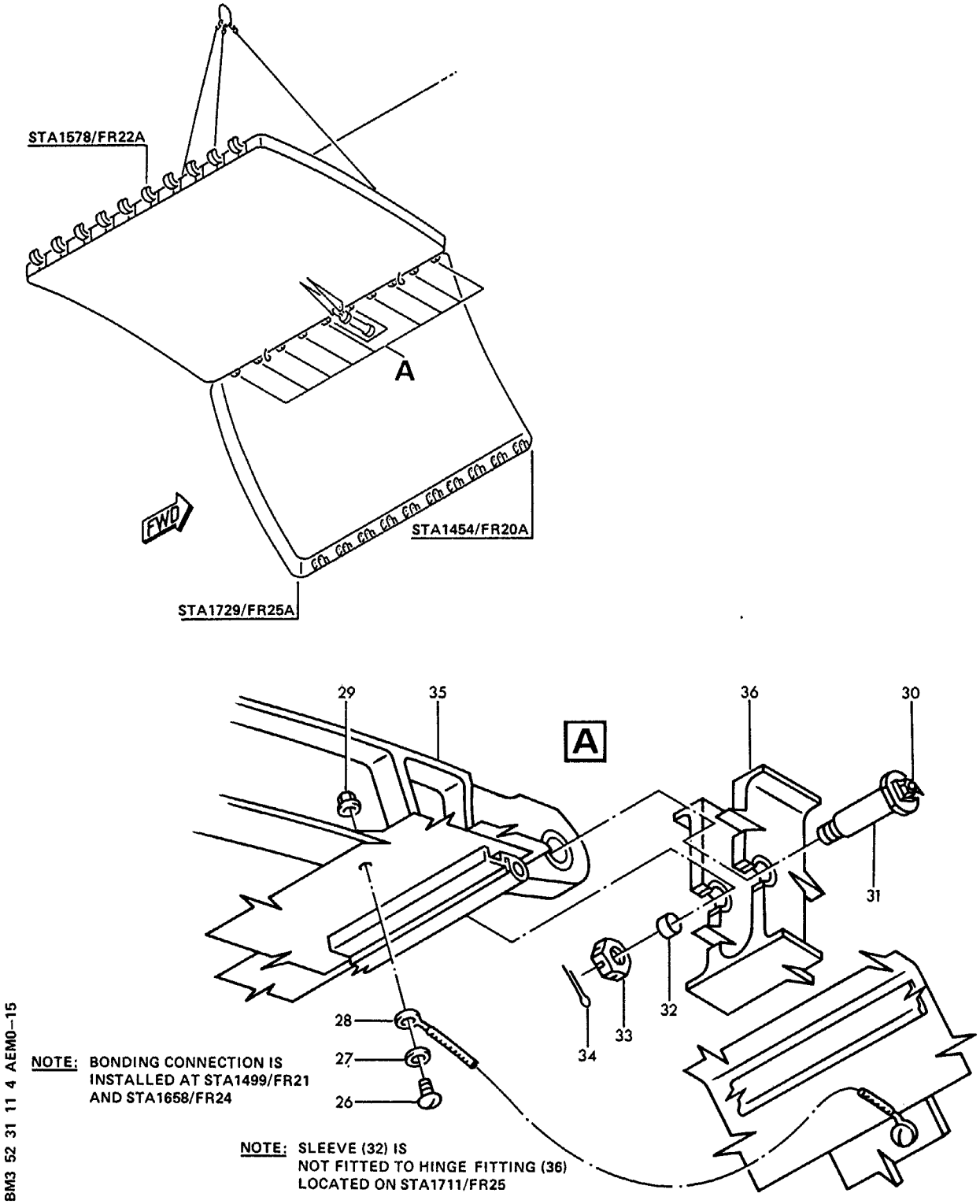


WIRE NO.	TO CONNECTOR OF 4004VT
5235–0007	3A
5235–0008	3G
5271–5003	1F
5271–5004	1G
5271–5005	1H
5271–5006	1J
5273–0124	50F
5273–0125	50G
5273–0126	50H
5273–0127	50J
5273–0128	50K
5273–0129	51F
5273–0130	51G

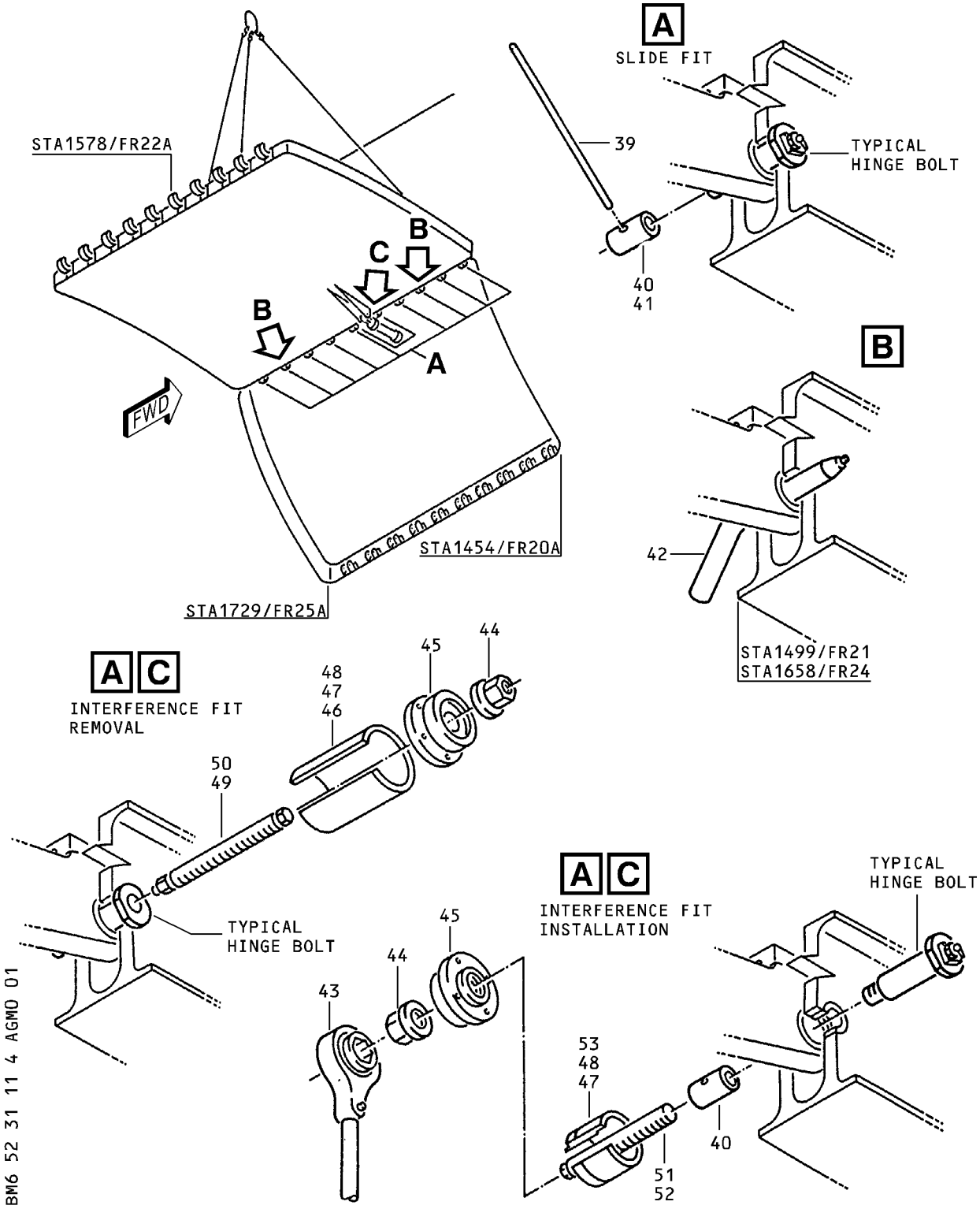
Removal/Installation of Wire Harness 914VB
Figure 403



Door Actuator Attachment and Door Hinge Connection
Figure 404



Door Hinge Connection
Figure 405



Removal/Installation Tools for Hinge Bolts
Figure 406

R

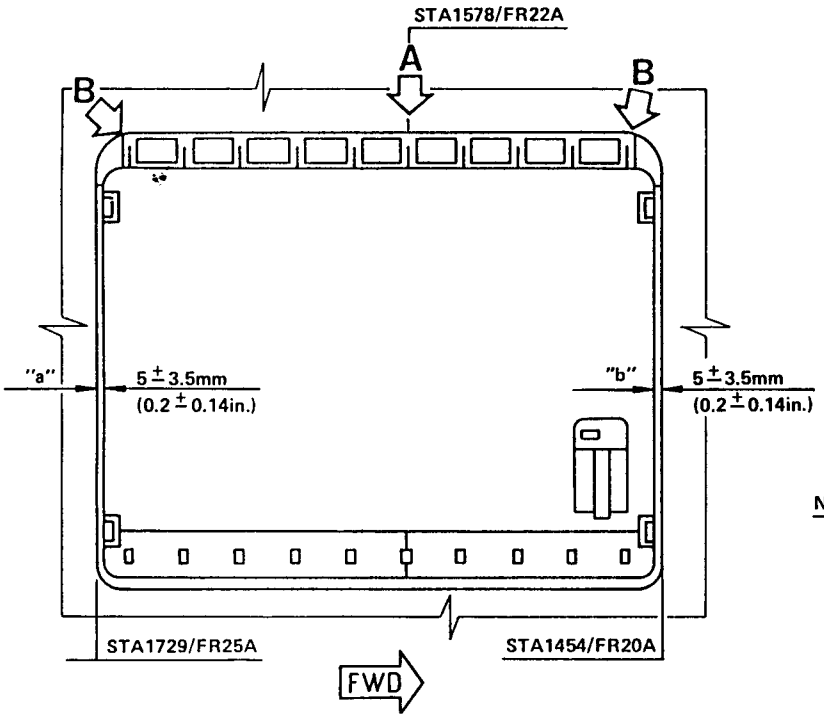
fitting (18) as follows:
(a)Remove cotter pin (15), nut (16) and washer (17) from bolt (21).
(b)Remove nut (19), washer (20), bolt (22) and bonding strap (23) from actuator attachment fitting (18).
CAUTION : THE DOOR ACTUATOR MUST BE SECURED AGAINST DROPPING BEFORE REMOVING BOLT (21).
(c)Remove bolt (21) from actuator attachment fitting (18).
(4)Remove bonding straps (28) located at STA1499/FR21 and STA1658/FR24 with nuts (29), washers (27) and bolts (26) from fuselage.
(5)Remove cotter pins (34), nuts (33) and sleeves (32) from hinge bolts (31) which connect hinge arms (35) and hinge fittings (36).
NOTE : Sleeves (32) are not installed at STA1578/FR22A and STA1711/FR25A.
(6)Remove hinge bolts (31) inserted with sliding fit as follows:
(a)Install protective cover (40) on each hinge bolt (31). If necessary use lever (39).
NOTE : At STA1578/FR22A use protective cover (41).
(b)Remove hinge bolts (31) from STA1499/FR21 and STA1684/FR24A and insert center pins (42) simultaneously.
(c)Remove all remaining hinge bolts (31) and spacers (25), installed only at STA1578/FR22A.
(7)If hinge bolts (31) cannot be removed (interference fit of hinge bolts), proceed as follows (Ref. Fig. 406):
(a)Remove grease nipples (30) from hinge bolts (31) and screw in extraction shafts (49).
NOTE : At STA1578/FR22A use extraction shaft (50).
(b)Remove hinge bolts (31) from STA1499/FR21 and STA1684/FR24 by means of removal tool (refer Table 1) and insert center pins (42) simultaneously.
(c)Remove all remaining hinge bolts (31) by means of removal tools (refer Table 1) and spacers (25), installed only at STA1578/FR22A.
(8)Make certain that all slings (1) are tight. Remove center pins (42) from hinge fittings (36).
(9)Carefully remove FWD cargo compartment door from fuselage and position in a suitable fixture or on a soft and clean pad.
(10)Remove cargo door sling (1) from FWD cargo compartment door.

	PART	ITEM	REMOVAL TOOL		INSTALLATION TOOL	
			HINGE BOLT AT FR22A	OTHER HINGE BOLTS	HINGE BOLT AT FR22A	ALL OTHER HINGE BOLTS
R	LEVER	39	98A52208001238	98A52208001238	98A52208001238	98A52208001238
R	PROTECTIVE	40	---	98A52208001216	---	98A52208001216
R	COVER	41	98A52208001218	---	98A52208001218	---
R	CENTER PIN	42	---	98A52208001230	---	98A52208001230
R	NUT	44	98A52208001228	98A52208001228	98A52208001228	98A52208001228
R	THRUST ASSY	45	98A52208001100	98A52208001100	98A52208001100	98A52208001100
R	SLEEVE	46	98A52208001220	---	---	---
R	SLEEVE	47	---	98A52208001224	---	98A52208001224
R	SLEEVE	48	---	98A52208001226	---	98A52208001226
R	EXTRACTION	49		98A52208001214	---	---
R	SHAFT	50	98A52208001212	---	---	---
R	INSERTION	51	---	---		98A52208001208
R	SHAFT	52	---	---	98A52208001210	---
R	SLEEVE	53	---	---	98A52208001222	---

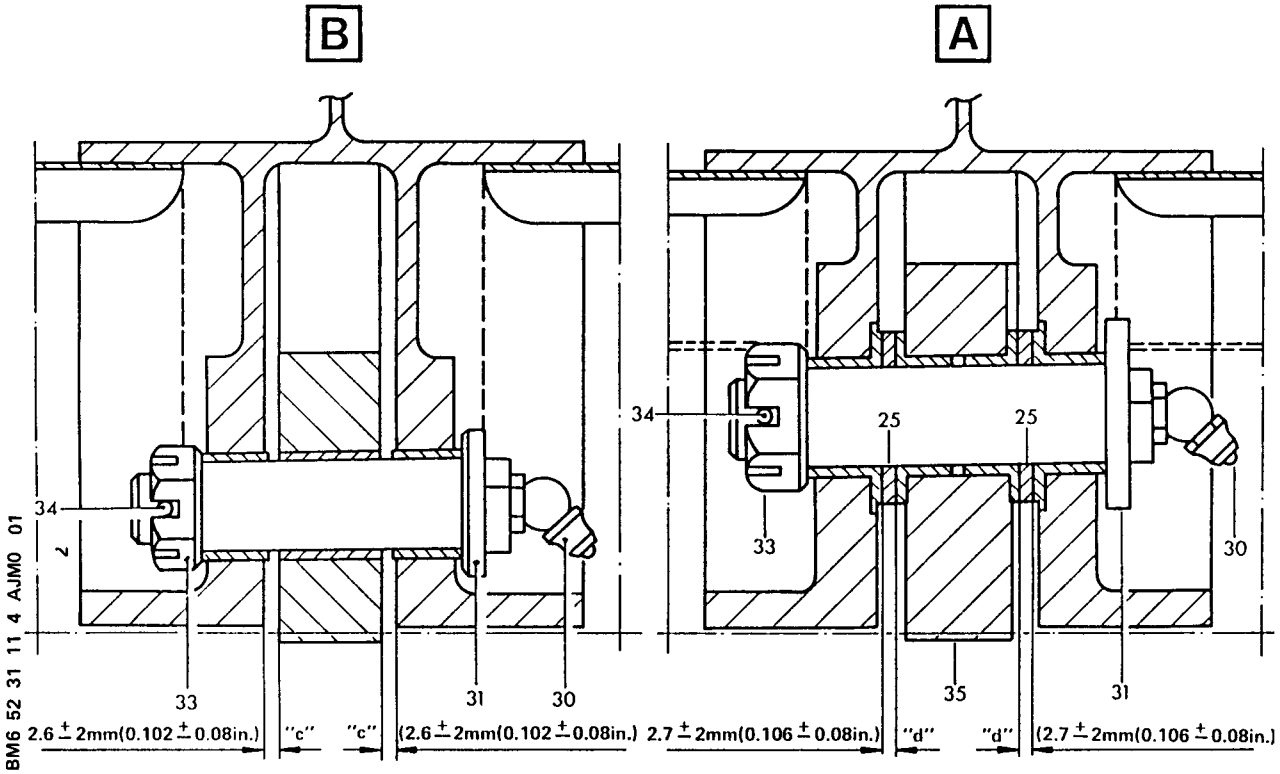
Table 1

C. Preparation for Installation
(1)Examine door frame of fuselage for general condition.
(2)Check bushes pressed in hinge fittings (36) for damage. If necessary, remove these bushes using suitable extraction tool.
(3)Examine replacement FWD cargo compartment door for general condition.
(4)Examine hinge bolts (31) for general condition and make certain that their lubrication channels are free. When removed, install grease nipples (30) in hinge bolts (31).
(5)Apply grease (Material No. 04-004) to bushes of hinge fittings (36) and hinge bolts (31).

D. Installation
(Ref. Fig. 407)
(1)Position crane and attach cargo door sling (1) to the hoisting lugs (3) of replacement FWD cargo compartment door.
(2)Position replacement FWD cargo compartment door in installation area and align bores of hinge arms (35) with hinge fittings (36).
(3)Insert center pins (42) into bores of hinge arms (35) and hinge fittings (36) at STA1499/FR21 and STA1684/FR24A.
(4)Insert hinge bolts (31) as follows:
(a)Install protective cover (40) on each hinge bolt (31). If necessary, use lever (39).
NOTE : At STA1578/FR22A use protective cover (41).
(b)Insert hinge bolt (31) and spacer (25) at STA1578/FR22A.
(c)Insert all other hinge bolts (31) at remaining door hinges.
(d)Remove center pins (42) and insert hinge bolts (31).
(e)Remove protective cover (40/41) from all hinge bolts (31).
(5)If hinge bolts (31) cannot be inserted (interference fit installation), proceed as follows (Ref. Fig. 406):
(a)Install protective cover (40) on each hinge bolt (31). If necessary, use lever (39). Screw insertion shaft (51) into protective cover (40).
NOTE : At STA1578/FR22A use protective cover (41) and insertion shaft (52).
(b)Insert hinge bolt (31) with spacers (25) by means of insertion tools (43),(44),(45) and (53) at STA1578/FR22A (refer Table 1).
(c)Insert all other hinge bolts (31) at remaining door hinges by means of insertion tools (43),(44),(45) and (47) or (48) (refer Table 1).
(d)Remove center pins (42) and insert hinge bolts (31).
(e)Remove protective covers (40),(41) and insertion shafts (51),(52) from all hinge bolts (31).
(6)Install sleeve (32) and nuts (33) on all hinge bolts (31). Do not tighten nuts (33) at this stage.
NOTE : Sleeves (32) must not be installed at STA1578/FR22A and STA1711/FR25A.
(7)Adjust lateral gaps of FWD cargo compartment door as follows:
(a)Close FWD cargo compartment door by means of crane, but do not lock.
(b)Check lateral gaps "a" and "b" between FWD cargo compartment door and fuselage.
(c)Check gaps "c" and "d" between hinge fittings (36) and hinge arms (35).
(d)If gaps are out of tolerance, change spacers (25) to get required gap.
(8)Open FWD cargo compartment door by means of crane.
(9)TORQUE nuts (33) to max. 0.49 m.daN (43.4 lbf.in.) and back off to next cotter pin hole.
(10)Secure nuts (33) with new cotter pins (34).
(11)Install bonding straps (28) at STA1499/FR21 and STA1658/FR24 as follows:
(a)Check contact areas for corrosion and protect with pure mineral vaseline (Material No. 04-012).
(b)Install bonding straps (28) with bolts (26), washers (27) and nuts (29) (Ref. 20-28-11, P. Block 1).
(c)Tighten nuts (29) and protect bonding area with electrical bonding lacquer (Material No. 07-001).
(12)Slightly close FWD cargo compartment door using crane and slowly move



NOTE: DIMENSIONS APPLY TO A/C SUPPORTED ON WHEELS OR JACKS AND WITHOUT PAYLOAD



Gaps - Door/Fuselage
Figure 407

R

operating handle to lock the door. If resistance to operating handle is felt, immediately move operating handle downwards and adjust "locking function" (Ref. 52-31-11, P. Block 501).
(13)Open FWD cargo compartment door using crane.
(14)Apply anti-corrosion compound (Material No. 05-002) to shaft of bolt (21).
(15)Position piston end of door actuator (24) to actuator attachment fitting (18) install bolt (21), washer (17) and nut (16).
(16)TORQUE nut (16) to max. 2.0 m.daN (177 lbf.in.) and back off to next cotter pin hole.
(17)Secure nut (16) with new cotter pin (15).
(18)Install bonding strap (23) of door actuator (24) as follows:
(a)Check contact area for corrosion and protect with grease (Material No. 04-012).
(b)Install bonding strap (23) with bolt (22), washer (20) and nut (19). Tighten nut (19) (Ref. 20-28-11, P. Block 1).
(c)Protect bonding area with electrical bonding lacquer (Material No. 07-001).
(19)Lubricate bolts (31) with synthetic grease (Material No. 04-004).
(20)Connect electrical cables of wire harness 914VB to terminal block 4004VT.
(21)Attach wire harness 914VB with tie-wraps to cable clamps of crossbeam.
(22)Pressurize YELLOW hydraulic system (Ref. 29-24-00, P. Block 301).
(23)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(24)Operate the FWD cargo compartment door to the open direction by means of electric pump to compensate the internal leakage of the door actuator which may occur.
(25)Remove cargo door sling (1) PN 98A52307529001 from hoisting lugs (3).
(26)To check the clearance between ceiling lining and piston rod of door actuator, close and open cargo compartment door (Ref. 52-30-00, P. Block 1).
(27)Check and adjust electrical control system (Ref. 52-35-00, P. Block 501).
(28)Check and adjust door warning switches (Ref. 52-71-11, P. Block 501).

R **ON A/C 001-003,

E. Test
(1)Close and lock FWD cargo compartment door (Ref. 52-30-00, P. Block 1). Door must close smoothly and easily.
(2)Check that all indicator flags are flush with door skin (Ref. 52-30-21, P. Block 501).
(3)Visually check that FWD cargo door seal is compressed throughout its length.
(4)Open access panel 811CR. Press pushbutton of operating handle and pull operating handle downwards from recess.
(5)Check that force required to move operating handle does not exceed 15 daN (34 lbf.).
(6)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1). Door must open smoothly and without sticking.
(7)Check that the internal mechanical lock of door actuator is engaged and green indicator light on access panel 122CR comes on.

(8)Turn selector on access panel 122CR to CLOSE position until FWD cargo compartment door is still open approx. 30 degrees, then release.
(9)Push operating handle upwards into recess until it locks.
(10)Turn selector to OPEN or CLOSE position. FWD cargo compartment door must not open or close.
CAUTION : If FWD cargo compartment door starts to open or to close, release selector immediately and rectify fault.
(11)Press pushbutton on door operating handle and pull downwards from recess.

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

E. Test
(1)Carry out functional check of residual pressure warning system (Ref. 52-73-00, P. Block 501).
(2)Close and lock FWD cargo compartment door (Ref. 52-30-00, P. Block 1). Door must close smoothly and easily.
(3)Check that all indicator flags are flush with door skin (Ref. 52-30-21, P. Block 501).
(4)Visually check that FWD cargo door seal is compressed throughout its length.
WARNING : DO NOT OPERATE THE OPERATING HANDLE WHEN RED WARNING LIGHT OF RESIDUAL PRESSURE WARNING SYSTEM FLASHES.
(5)Open access panel 811CR. Press pushbutton of operating handle and pull operating handle downwards from recess.
(6)Check that force required to move operating handle does not exceed 15 daN (34 lbf.).
(7)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1). Door must open smoothly and without sticking.
(8)Check that the internal mechanical lock of door actuator is engaged and green indicator light on access panel 122CR comes on.
(9)Turn selector on access panel 122CR to CLOSE position until FWD cargo compartment door is still open approx. 30 degrees, then release.
(10)Push operating handle upwards into recess until it locks.
(11)Turn selector to OPEN or CLOSE position. FWD cargo compartment door must not open or close.
CAUTION : If FWD cargo compartment door starts to open or to close, release selector immediately and rectify fault.
(12)Press pushbutton on door operating handle and pull downwards from recess.

**ON A/C ALL

F. Close-Up
(1)Coat projecting threads and bolt heads as follows:
(a)For bolts attaching parts directly to door structure, use polyurethane primer (Material No. 16-001) and polyurethane grey top coat

(Material No. 16-002).
(b)Apply anti-corrosion compound (Material No. 05-002) to bolts in mechanism.
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(4)Make certain that water drain holes are clean and free from obstructions.
(5)Install cargo compartment ceiling panel 132AC.
(6)Remove hoisting lugs (3) and re-install in hoist fittings (4) in reverse position and place adhesive patches (5) (Material No. 05-052) over hoisting points (Ref. 11-20-00, P. Block 1).
(7)Install upper access covers 132AR thru 132LR and lower access covers 134BR thru 134FR of cargo compartment door area.
(8)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(9)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(10)Remove access platform.

FWD CARGO COMPARTMENT DOOR- ADJUSTMENT/TEST

1. Reason for the Job

Adjustment of FWD cargo compartment door to make certain that the position on aircraft is correct:
NOTE : Item numbers correspond with operations in para. 3.B.
(1)Gaps between FWD cargo compartment door and fuselage.
(2)Skin Offset between FWD cargo compartment door and fuselage.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B. 98A52307587000	Eccentric Bushing Adjustment Jig - FWD Cargo Compartment Door
C.	Feeler Gage
D.	Torque Wrench, 1.0 m.daN (89 lbf.in.)
E.	Cotter Pins
F.	Tab Washer
G.	Spacer for Center Hinge Fitting
H. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-30-31, P. Block 401	FWD, AFT Cargo Door Latch and Stop Fittings
- 52-31-11, P. Block 401	FWD Cargo Compartment Door
- 52-33-18, P. Block 401	Door Actuator
- 52-35-00, P. Block 501	Cargo Compartment Doors Electrical Control System
- 52-71-11, P. Block 501	Door Warning Switches

3. Procedure

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

FWD CARGO COMPARTMENT DOOR- ADJUSTMENT/TEST

1. Reason for the Job

Adjustment of FWD cargo compartment door to make certain that the position on aircraft is correct:
NOTE : Item numbers correspond with operations in para. 3.B.
(1)Gaps between FWD cargo compartment door and fuselage.

(2)Skin Offset between FWD cargo compartment door and fuselage.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B. 98A52307587000	Eccentric Bushing Adjustment Jig - FWD Cargo Compartment Door
C.	Feeler Gage
D.	Torque Wrench, 1.0 m.daN (89 lbf.in.)
E.	Cotter Pins
F.	Tab Washer
G.	Spacer for Center Hinge Fitting
H. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

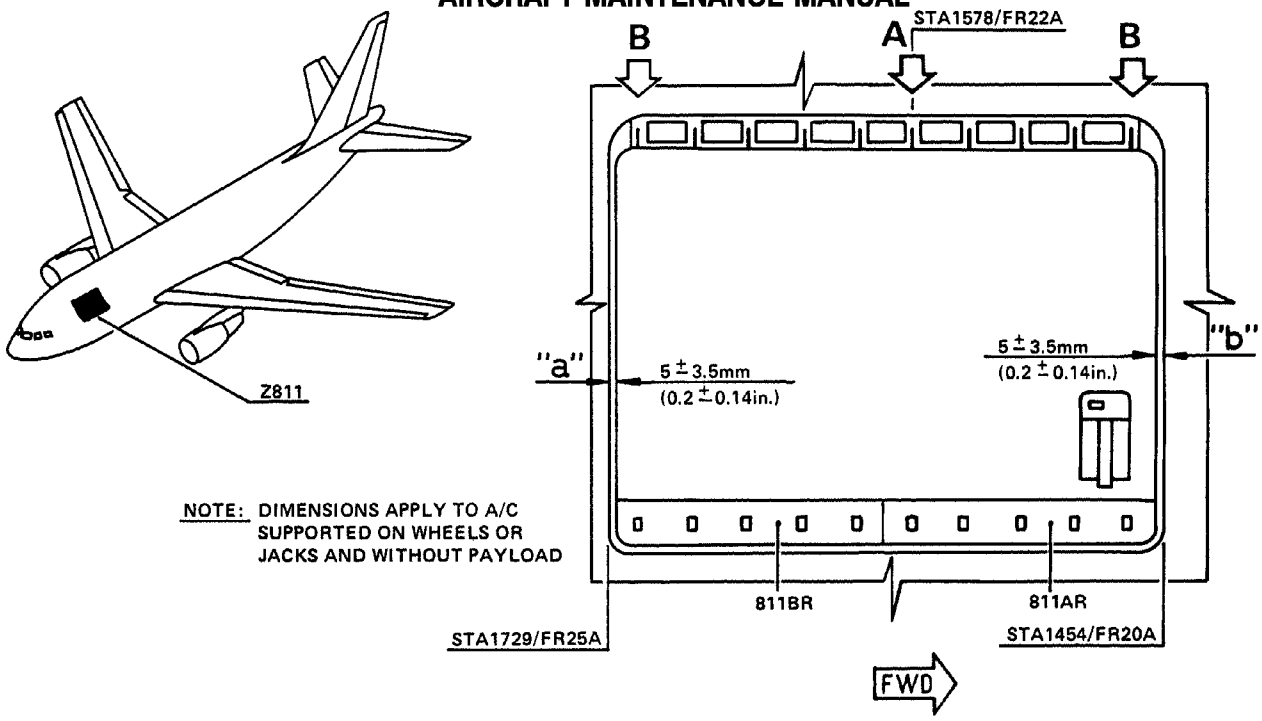
- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-30-31, P. Block 401	FWD, AFT Cargo Door Latch and Stop Fittings
- 52-31-11, P. Block 401	FWD Cargo Compartment Door
- 52-33-18, P. Block 401	Door Actuator
- 52-35-00, P. Block 501	Cargo Compartment Doors Electrical Control System
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning System

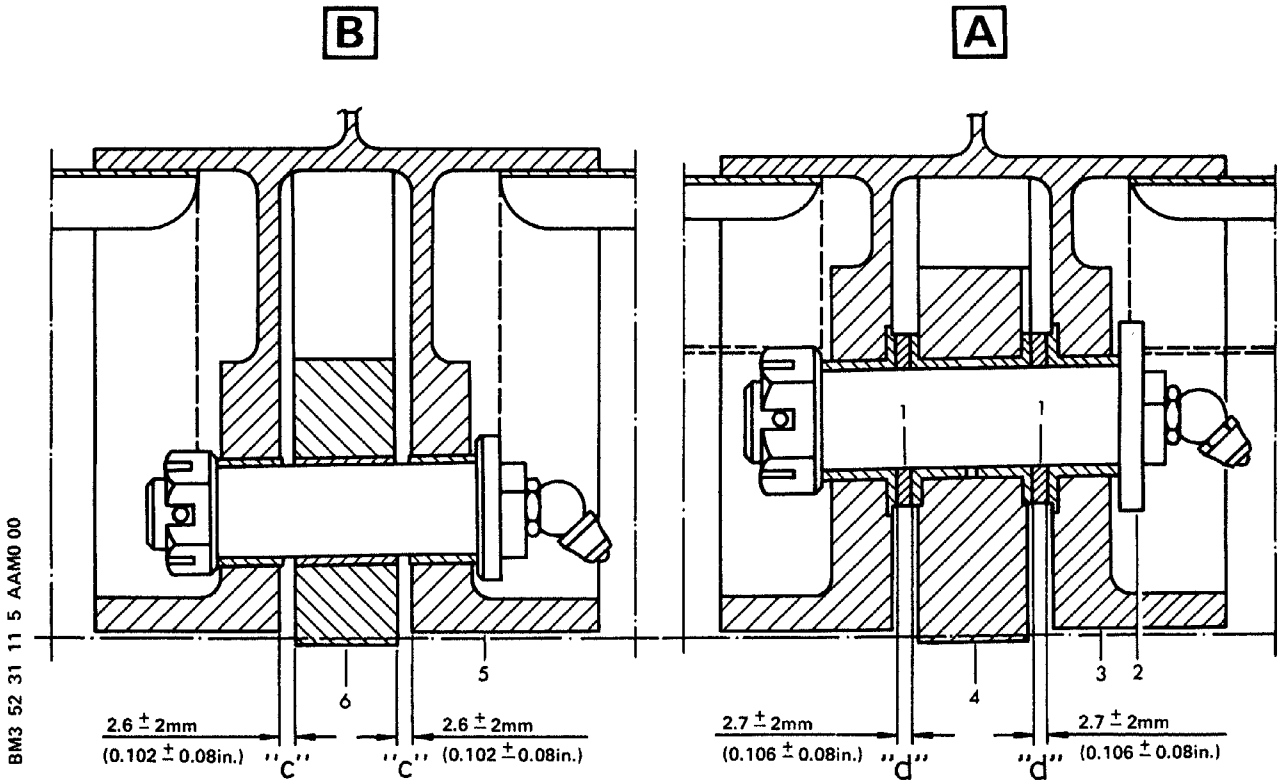
3. Procedure

**ON A/C ALL

A. Job Set-Up
(1)Position access platform.
(2)Remove access covers 811AR and 811BR from the FWD cargo compartment door to gain access to the locking mechanism.
(3)Remove access covers 132AR thru 132LR from the door frame above the FWD cargo compartment door to gain access to hinge area.
(4)Remove access covers 134BR thru 134FR from the door frame below the FWD cargo compartment door to gain access to door sill area.
(5)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(6)Make certain that electronics racks ventilation is correct.
(7)Make certain that FWD cargo compartment door is correctly closed and locked (Ref. 52-30-00, P. Block 1).

B. Adjustment
(1)Gaps between FWD Cargo Compartment Door and Fuselage (Ref. Fig. 501)

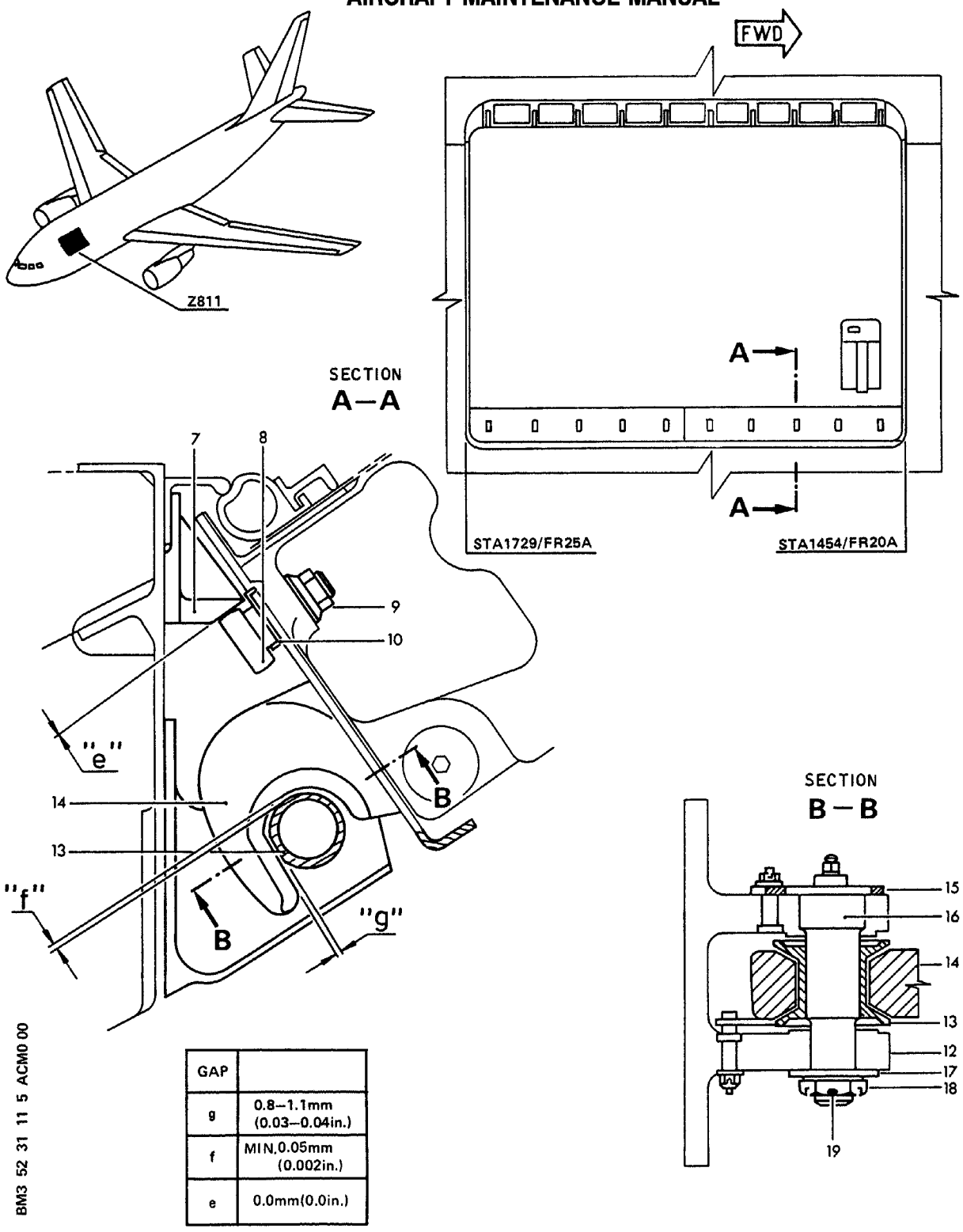




Gaps - FWD Cargo Compartment Door/Fuselage
Figure 501

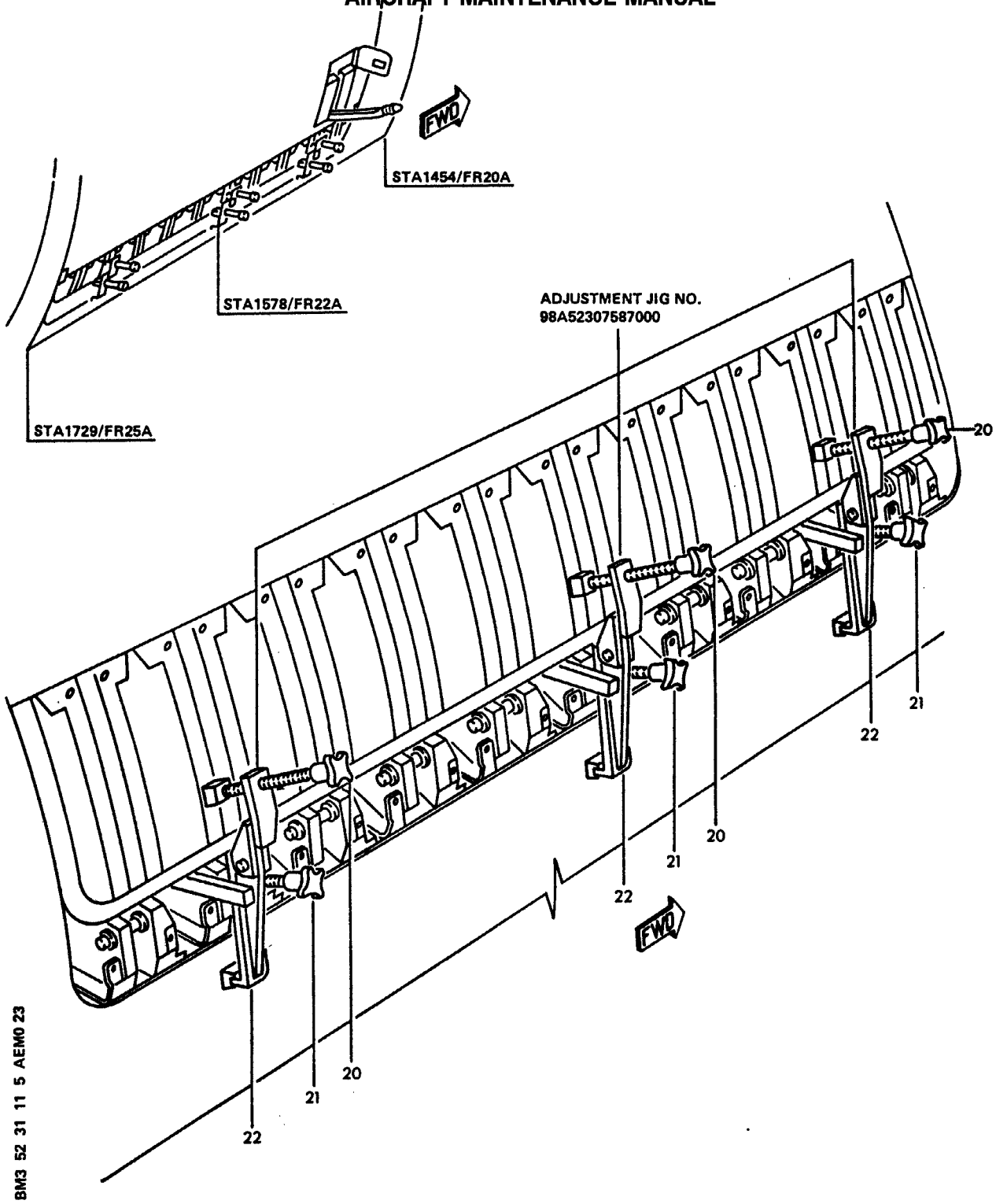
(a)Measure lateral gaps "a" and "b" between FWD cargo compartment door and fuselage.
(b)Measure gaps "c" and "d" between forward/aft hinge arms (4),(6) and hinge fittings (3),(5).
(c)Adjust gaps by changing spacers (1) between the bushes of center hinge arm (4) and hinge fitting (3).
NOTE : For removal and installation of hinge bolt (2) refer to 52-31-11, P. Block 401.

(2)Skin Offset between Cargo Compartment Door and Fuselage
(Ref. Fig. 502)
(Ref. Fig. 503)
(Ref. Fig. 504)
(a)Adjust eccentric bolts (16) and the eccentric bushes (13) as follows:
1 Open cargo compartment door (Ref. 52-30-00, P. Block 1) to gain access to stop bolts (8).
2 Release tab washers (10) and loosen nuts (9) of stop bolts (8) to obtain clearance for door adjustment.
3 Remove cotter pins (19), nuts (18) and washers (17) from eccentric bolts (16).
4 Close cargo compartment door (Ref. 52-30-00, P. Block 1) but do not lock at this stage.
5 Position eccentric bush adjustment jig PN 98A52307587000 on FWD cargo compartment door as follows:
a Install fwd support of adjustment jig (22) at STA1499/FR21.
b Install center support of adjustment jig (22) at STA1578/FR22A.
c Install aft support of adjustment jig (22) at STA1684/FR24A.
6 Turn adjustment screws (20),(21) of adjustment jig until skin offset between cargo compartment door and fuselage is between min. -1 mm (-0.04 in.) and max. -4 mm (-0.16 in.).
7 Push operating handle slowly upwards to recess. Make certain that locking hooks (14) engage lightly over eccentric bushes (13).
8 Adjust gaps "g" and "f" between eccentric bushes (13) and locking hooks (14) by turning eccentric bolts (16).
NOTE : To obtain clearance "g" (0.8 to 1.1 mm (0.31 to 0.43 in.)), select position of eccentric bolt (16) which has the least clearance "f" (min. 0.05 mm (0.002 in.)) between latch back (14) and eccentric bush (13).
9 Press eccentric bolts (16) into serrated plates (15) and install washers (17) and nuts (18) to eccentric bolts (16).
R 10 TORQUE nuts (18) to 0.49 m.daN (43.37 lbs.in.).
11 Unlock and lock cargo compartment door by moving operating handle and check correct adjustment of gaps "g" and "f".
12 Make certain that locking hooks (14) do not touch eccentric bushes (13).
13 If gaps "f" and/or "g" exceed limits, or if locking hooks (14) touch eccentric bushes (13), remove nuts (18) and washers (17) and continue adjustment according to procedure described in para. B.(2)(a).
14 Safety nuts (18) with new cotter pins (19).
15 Make certain that the stop bolts (8) are correctly adjusted (refer to para. B.(2)(b).

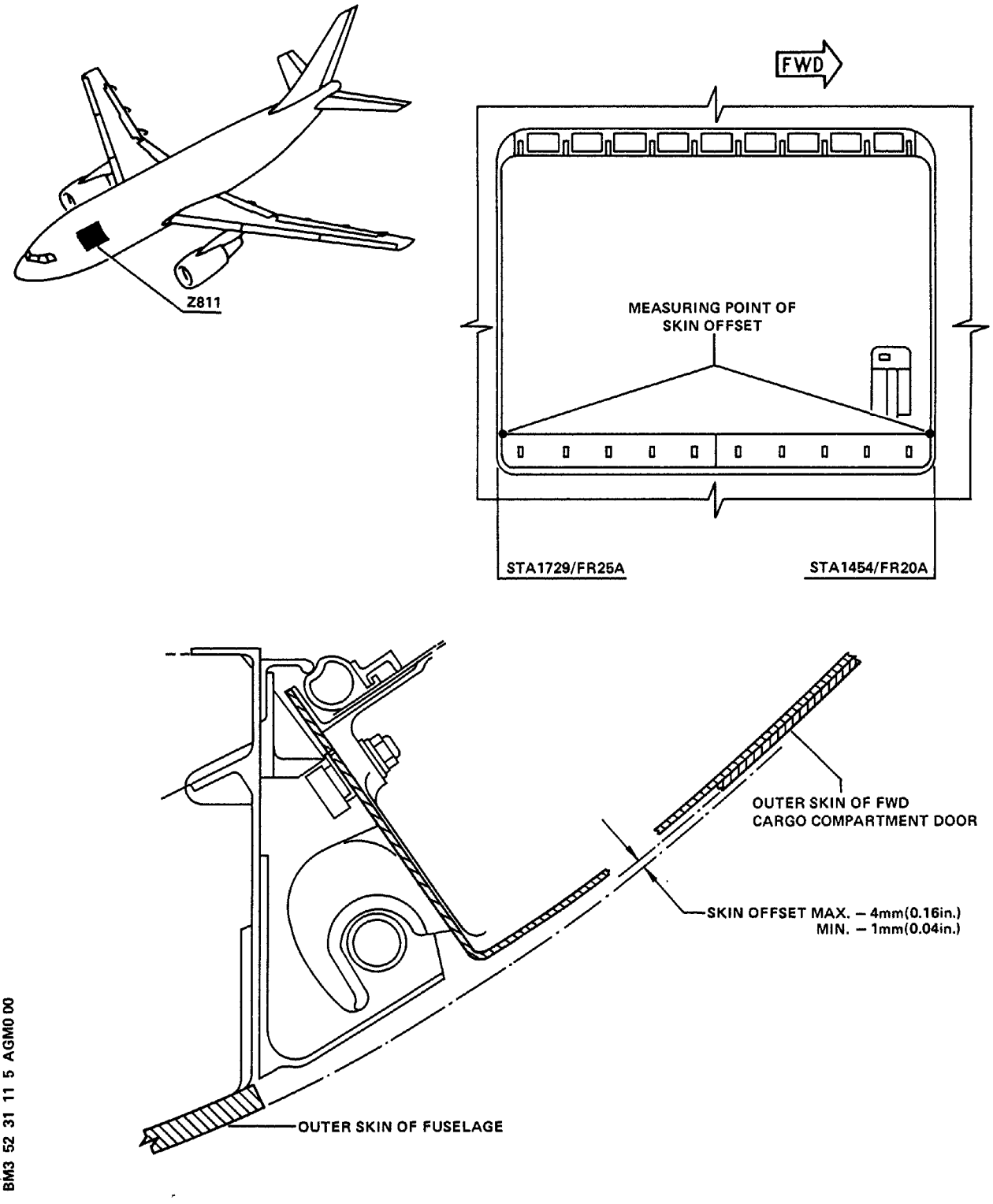


GAP	
g	0.8–1.1mm (0.03–0.04in.)
f	MIN.0.05mm (0.002in.)
e	0.0mm(0.0in.)

Clearance on Latch and Stop Fittings
Figure 502



Eccentric Bush Adjustment Jig
Figure 503



Skin Offset of FWD Cargo Compartment Door
Figure 504

16 If stop bolts (8) are correctly adjusted, remove eccentric bush adjustment jig PN 98A52307587000 from cargo compartment door.

(b)Adjustment of Stop Bolts

1 Make certain that eccentric bolts and eccentric bushes are correctly adjusted and skin offset between cargo compartment door and fuselage is correct with eccentric bushes adjustment jig PN 98A52307587000.

CAUTION : START ADJUSTMENT OF STOP BOLTS WITH THE SMALLEST RADIUS OF STOP BOLT ECCENTRIC HEAD POSITIONED NEXT TO STOP FITTING (7).

2 Replace tab washers (10) on stop bolts (8) and hand-tighten nuts (9) (Ref. 52-30-31, P. Block 401).

3 Make certain that cargo compartment door is closed (Ref. 52-30-00, P. Block 1) but not locked.

4 Adjust gaps "e" between stop bolts (8) and stop fitting (7) to zero by turning stop bolts (8).

5 Tighten nuts (9) and secure stop bolts (8) with new tab washers (10).

6 Remove the eccentric bush adjustment jig PN 98A52307587000 from cargo compartment door.

**ON A/C 001-003,

C. Test

(1)Check that operating handle is in its locked position.

(2)Check that all indicator flags are flush with door skin (Ref. 52-30-21, P. Block 501).

(3)Check that the bulb section of door seal is compressed throughout its length.

(4)Unlock and open cargo compartment door (Ref. 52-30-00, P. Block 1) which must open smoothly and without sticking.

(5)Make certain that door actuator opening angle of 127.5 ±0.5° is correct (Ref. 52-33-18, P. Block 401).

(6)Close and lock cargo compartment door (Ref. 52-30-00, P. Block 1) which must close easily and smoothly and without sticking.

(7)Measure force required to operate operating handle. Operating force must not exceed 15 daN (34 lbf).

(8)Open and close cargo compartment door and make certain that green indicator light on selector panel comes on when cargo door is fully opened and goes off when cargo door starts to close (Ref. 52-35-00, P. Block 501).

(9)Carry out operational test of door warning switches for cargo compartment door (Ref. 52-71-11, P. Block 501).

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

C. Test

(1)Check that operating handle is in its locked position.

(2)Check that all indicator flags are flush with door skin (Ref. 52-30-21, P. Block 501).
(3)Check that the bulb section of door seal is compressed throughout its length.
(4)Unlock and open cargo compartment door (Ref. 52-30-00, P. Block 1) which must open smoothly and without sticking.
(5)Make certain that door actuator opening angle of 127.5 ±0.5° is correct (Ref. 52-33-18, P. Block 401).
(6)Close and lock cargo compartment door (Ref. 52-30-00, P. Block 1) which must close easily and smoothly and without sticking.
(7)Measure force required to operate operating handle. Operating force must not exceed 15 daN (34 lbf).
(8)Open and close cargo compartment door and make certain that green indicator light on selector panel comes on when cargo door is fully opened and goes off when cargo door starts to close (Ref. 52-35-00, P. Block 501).
(9)Carry out operational test of door warning switches for cargo compartment door (Ref. 52-71-11, P. Block 501).
(10)Carry out functional check of residual pressure warning system (Ref. 52-73-00, P. Block 501).

**ON A/C ALL

D. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Close and lock cargo compartment door (Ref. 52-30-00, P. Block 1).
(3)Spray all components that have been removed/installed or handled during the operations with protective film (Material No. 05-027).
(4)Install access covers 811AR and 811BR on the cargo compartment door.
(5)Install access cover 132AR thru 132AL to door frame above the cargo compartment door.
(6)Install access cover 134BR thru 134FR to door frame below the cargo compartment door.
(7)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Remove access platform.

CAUTION : PERCENTAGE (%) OF ALLOWABLE DAMAGE IS ALWAYS RELATED TO THE NOMINAL MATERIAL THICKNESS AS SPECIFIED IN SRM (STRUCTURAL REPAIR MANUAL).

NOTE : Should crack formation be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

1. Reason for the Job

A. To monitor the condition of the FWD cargo compartment door:

NOTE : Item numbers correspond with operations in 3.B.

(1)Visual inspection of cargo door structure.
(2)Visual inspection of attachment fittings and other cargo door components.
(3)Check of cargo door alignment.
(4)Check of locking mechanism and skin offset.
(5)Measurement of fits and clearances.
(6)Operational check of related cargo door systems.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B. 98A52307587000	Eccentric Bushing Adjustment Jig - FWD Cargo Compartment Door
C.	Circuit Breaker Safety Clips and Tags
D.	Measuring Instruments
E.	Packing Plate, 1.4 mm (0.055 in.) thick
F. Material No. 05-027	Special Materials (Ref. 20-31-00)
G. Material No. 08-001	Bonding and Adhesive Compounds (Ref. 20-31-00)
Referenced Procedures	
- 20-28-11, P. Block 1	Electrical Bonding
- 24-41-00, P. Block 301	AC External Power Control
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-30-13, P. Block 401	FWD, AFT Cargo Door Lining and Insulation
- 52-30-18, P. Block 401	FWD, AFT Cargo Door Seal
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-30-31, P. Block 401	FWD, AFT Cargo Door Latch and Stop Fittings
- 52-31-11, P. Block 401	FWD Cargo Compartment Door
- 52-31-11, P. Block 501	FWD Cargo Compartment Door

- 52-33-18, P. Block 401 Door Actuator
- 52-35-00, P. Block 501 Cargo Compartment Doors Electrical Control System
- 52-71-11, P. Block 501 Door Warning Switches
Structural Repair Manual (SRM)

3. Procedure

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

FWD CARGO COMPARTMENT DOOR - INSPECTION/CHECK

CAUTION : PERCENTAGE (%) OF ALLOWABLE DAMAGE IS ALWAYS RELATED TO THE NOMINAL MATERIAL THICKNESS AS SPECIFIED IN SRM (STRUCTURAL REPAIR MANUAL).

NOTE : Should crack formation be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

1. Reason for the Job

A. To monitor the condition of the FWD cargo compartment door:

NOTE : Item numbers correspond with operations in 3.B.

(1)Visual inspection of cargo door structure.
(2)Visual inspection of attachment fittings and other cargo door components.
(3)Check of cargo door alignment.
(4)Check of locking mechanism and skin offset.
(5)Measurement of fits and clearances.
(6)Operational check of related cargo door systems.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B. 98A52307587000	Eccentric Bushing Adjustment Jig - FWD Cargo Compartment Door
C.	Circuit Breaker Safety Clips and Tags
D.	Measuring Instruments
E.	Packing Plate, 1.4 mm (0.055 in.) thick
F. Material No. 05-027	Special Materials (Ref. 20-31-00)
G. Material No. 08-001	Bonding and Adhesive Compounds (Ref. 20-31-00)

Referenced Procedures

- 20-28-11, P. Block 1	Electrical Bonding
- 24-41-00, P. Block 301	AC External Power Control
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-30-13, P. Block 401	FWD, AFT Cargo Door Lining and Insulation
- 52-30-18, P. Block 401	FWD, AFT Cargo Door Seal
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-30-31, P. Block 401	FWD, AFT Cargo Door Latch and Stop Fittings
- 52-31-11, P. Block 401	FWD Cargo Compartment Door
- 52-31-11, P. Block 501	FWD Cargo Compartment Door
- 52-33-18, P. Block 401	Door Actuator
- 52-35-00, P. Block 501	Cargo Compartment Doors Electrical Control System
- 52-71-11, P. Block 501	Door Warning Switches
- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning System
	Structural Repair Manual (SRM)

3. Procedure

**ON A/C ALL

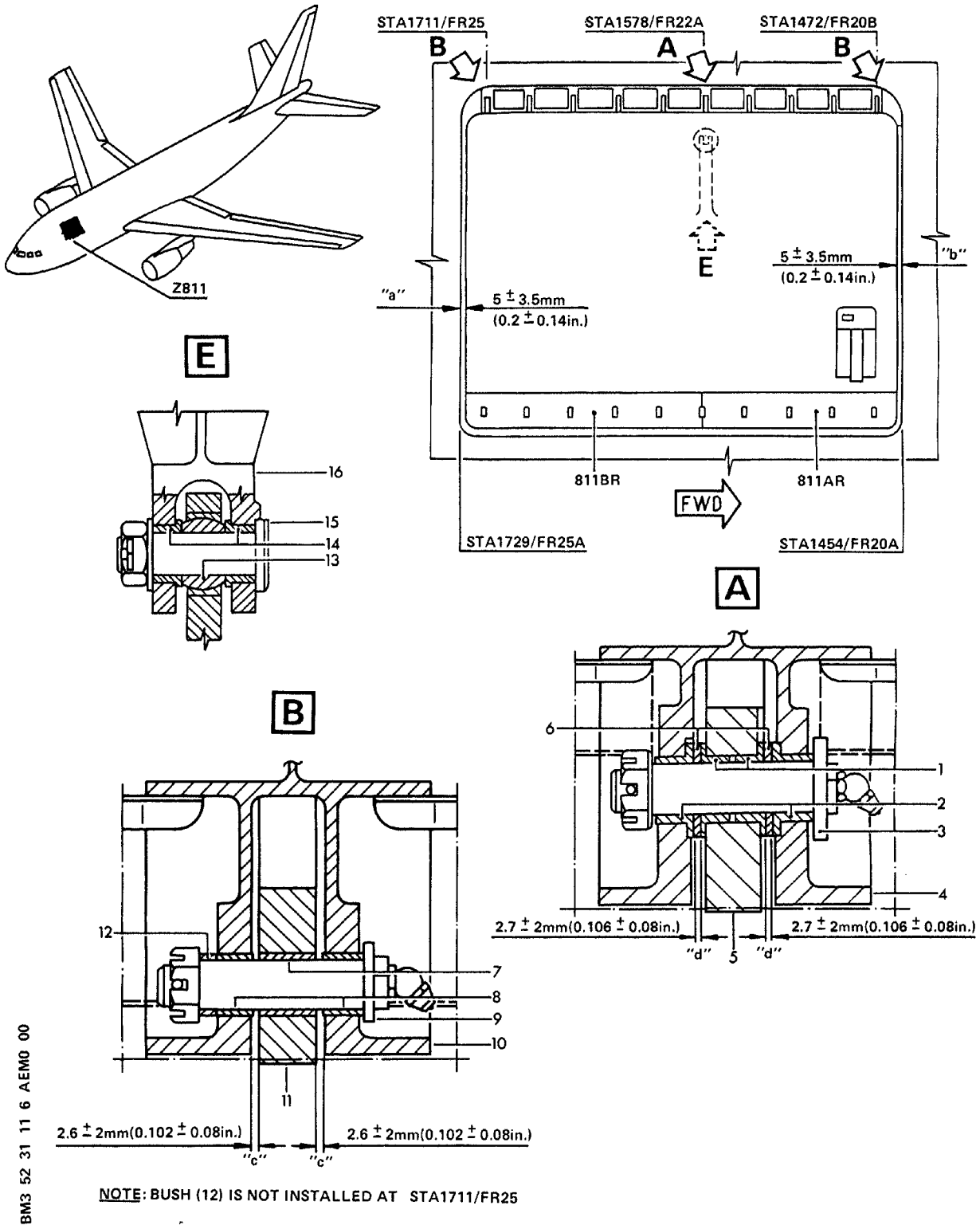
A. Job Set-Up
(1)Position access platform.
(2)Remove access covers 811AR and 811BR from FWD cargo compartment door.
(3)Remove access covers 132AR thru 132LR from upper FWD cargo compartment door area.
(4)Remove access covers 134BR thru 134FR from lower FWD cargo compartment door area.
(5)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(6)Make certain that electronics racks ventilation is correct.
(7)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(8)Install door actuator safety lock to FWD cargo compartment door actuator (Ref. 52-30-00, P. Block 301).
(9)Remove insulation mats from FWD cargo compartment door (Ref. 52-30-13, P. Block 401).
(10)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC HYD PUMP	23GX	GEN2/805
133VU	HYDRAULIC/ACCU PRESS CTL ! CARGO DOOR PUMP	7GX	333/T51

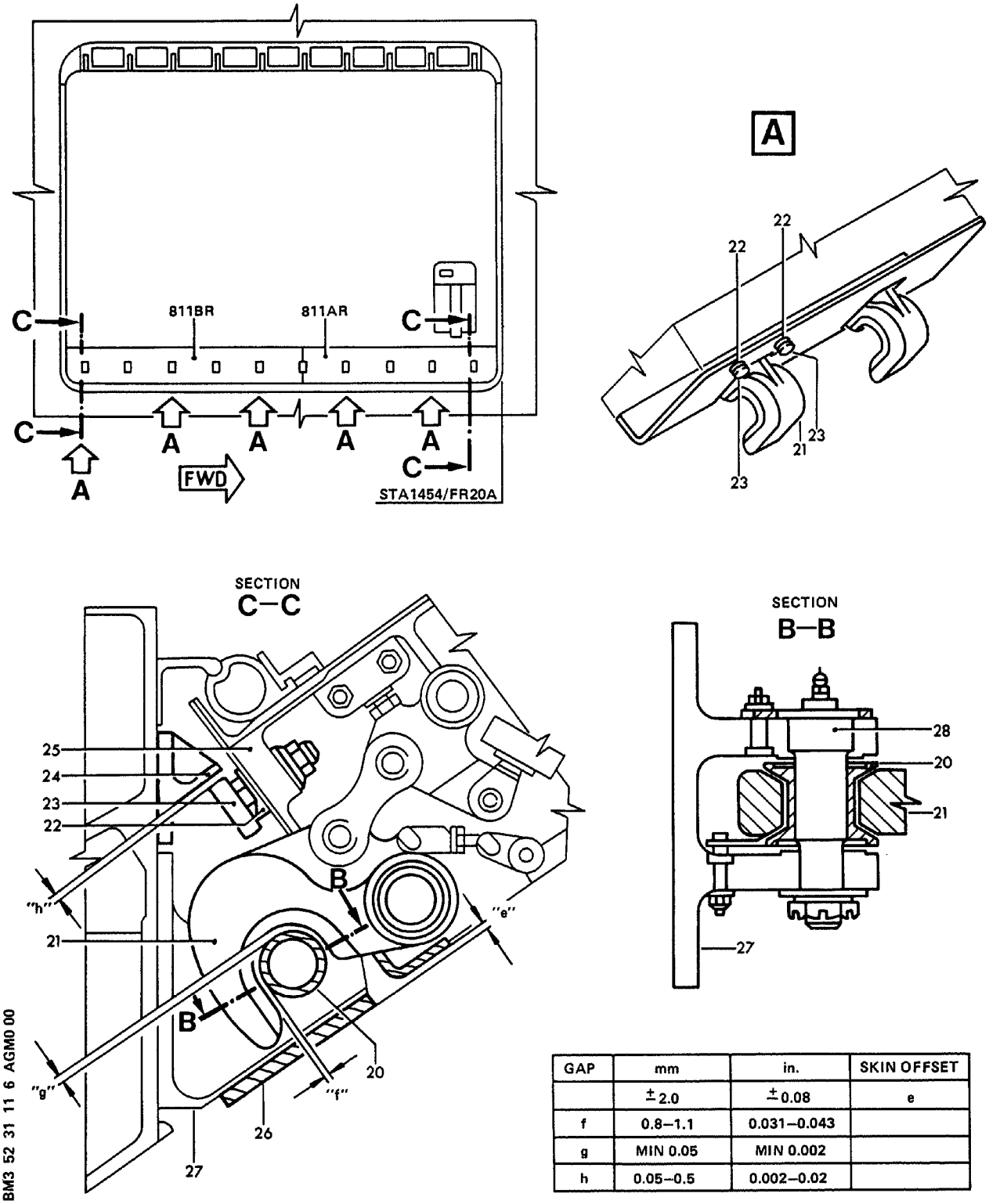
B. Inspection/Check
(1)Visual Inspection of Cargo Door Structure

R (a)The following areas have specific damage criteria:
R 1 Inner skin.
R 2 Outer skin.
R 3 Machined parts.
R 4 For the damage limits for steps 1 to 3 refer to SRM 52-30-00, P. Block 101.
R (b)Should damage limits be exceeded, a structural repair must be done, or the component must be replaced.
R 1 For the removal of scratches, marks and dents refer to 51-73-10, P. Block 801.
R 2 For the removal of corrosion refer to 51-74-10, P. Block 801.
R 3 For the repair of paint coatings refer to 51-75-10, P. Block 801.
R 4 For the repair of sealing refer to 51-76-10, P. Block 801.
R (c)Check riveted joints for loose rivets.
NOTE : Loose rivets must be replaced.
R (d)Check all drain valves at longeron 3 and 4.
1 Lift rubber seal-flap of drain valves and check that drain holes are clean and clear from obstructions.
2 Check that rubber seal-flaps are in good condition. If necessary, replace damaged seal flap.
3 Check drain valves for security of attachment and for missing parts.
4 Check fillet in area of drain valves and renew it with filler (Material No. 08-001) if necessary.

(2)Visual Inspection of Attachment Fittings and other Cargo Door Components
(Ref. Fig. 601)
(Ref. Fig. 602)
(a)Check for damage-free surface at door hinge arms (5),(11) and fuselage frame fittings (4),(10).
(b)Carefully check for damage in radii at intersection of fuselage frame fitting and hinge arm attachments.
NOTE : Damage is not permissible.
(c)Scratches: Determine repair in accordance with diagram. Scratches must be repaired. For removal of scratches ref. 51-73-10, P. Block 801.
(d)Check for security of attachment and damage-free surface at hinge arm bushes (1),(2),(7),(8) and hinge bolts (3), (9). For replacement of hinge bolts ref. 52-31-11, P. Block 401.
(e)Check for security of attachment and damage-free surface at actuator attachment fitting bushes (13),(14) and bolt (15). For removal/ installation of bolt (15) ref. 52-33-18, P. Block 401.
(f)Carefully check for deformation of bolt (15). Deformation is not permissible.
(g)Check for damage-free surface at actuator attachment fitting (16) and all exposed blend radii.
(h)Scratches: Determine repair in accordance with diagram. Scratches must be repaired. For removal of scratches ref. 51-73-10, P. Block 801.
(i)Check stop bolts (23) for security of attachment and make certain that tab of each tab washer (22) is located correctly in hole of frame.
NOTE : Loose stop bolts must be installed and safetied with new tab washers (Ref. 52-30-31, P. Block 401).
(j)Check locking hooks (21) for security of attachment and damage-free



FWD Cargo Compartment Door - Gaps Door/Fuselage
Figure 601



GAP	mm	in.	SKIN OFFSET
	±2.0	±0.08	e
f	0.8–1.1	0.031–0.043	
g	MIN 0.05	MIN 0.002	
h	0.05–0.5	0.002–0.02	

FWD Cargo Compartment Door - Locking Mechanism
Figure 602

surface.

(k)Check lock fittings (27) and eccentric bolts (28) for security of attachment and damage-free surfaces.

(l)Check eccentric bushes (20) for damage-free surfaces, and make certain that eccentric bushes (20) are free to move on eccentric bolts (28).

(m)Check bonding straps for damage (Ref. 20-28-11, P. Block 1).

NOTE : Damage is not permissible.

(n)Check door seal for damage and wear.

NOTE : Door seal must be replaced if damaged or worn (Ref. 52-30-18, P. Block 401).

(o)Remove safety lock from door actuator (Ref. 52-30-00, P. Block 301).

(p)Close and lock FWD cargo compartment door (Ref. 52-30-00, P. Block 1) and check that the bulb section compresses the door seal all around.

(3)Check of Cargo Door Alignment

NOTE : Make certain that FWD cargo compartment door is closed and correctly locked (Ref. 52-30-00, P. Block 1).

(a)Measure lateral gaps "a" and "b" between FWD cargo compartment door and fuselage.

(b)Measure gaps "c" and "d" between hinge arms (11) of cargo door and hinge fitting (10) of fuselage. Make certain that gaps are identical.

(c)When gaps "a" and "b" or/and "c" and "d" exceed limits, change spacer (6) installed between inner flange bushes (1) of hinge arm (5) and outer flanged bushes (2) of hinge fittings (4) at STA1578/FR22A (Ref. 52-31-11, P. Block 501).

(4)Check of Locking Mechanism and Skin Offset

(Ref. Fig. 603)

(Ref. Fig. 604)

NOTE : Make certain that FWD cargo compartment door is closed but operating handle is pulled downwards (Ref. 52-30-00, P. Block 1).

(a)Position eccentric bush adjustment jig PN 98A52307587000 to FWD cargo compartment door as follows:

1 Install fwd support of adjustment jig at STA1449/FR21.

2 Install center support of adjustment jig at STA1578/FR22A.

3 Install aft support of adjustment jig at STA1684/FR24A.

(b)Turn adjustment screws of adjustment jig until stop bolts (23) come in contact with stop fittings (24).

(c)Check that skin offset between outer skin of FWD cargo compartment door and outer skin of fuselage is correct.

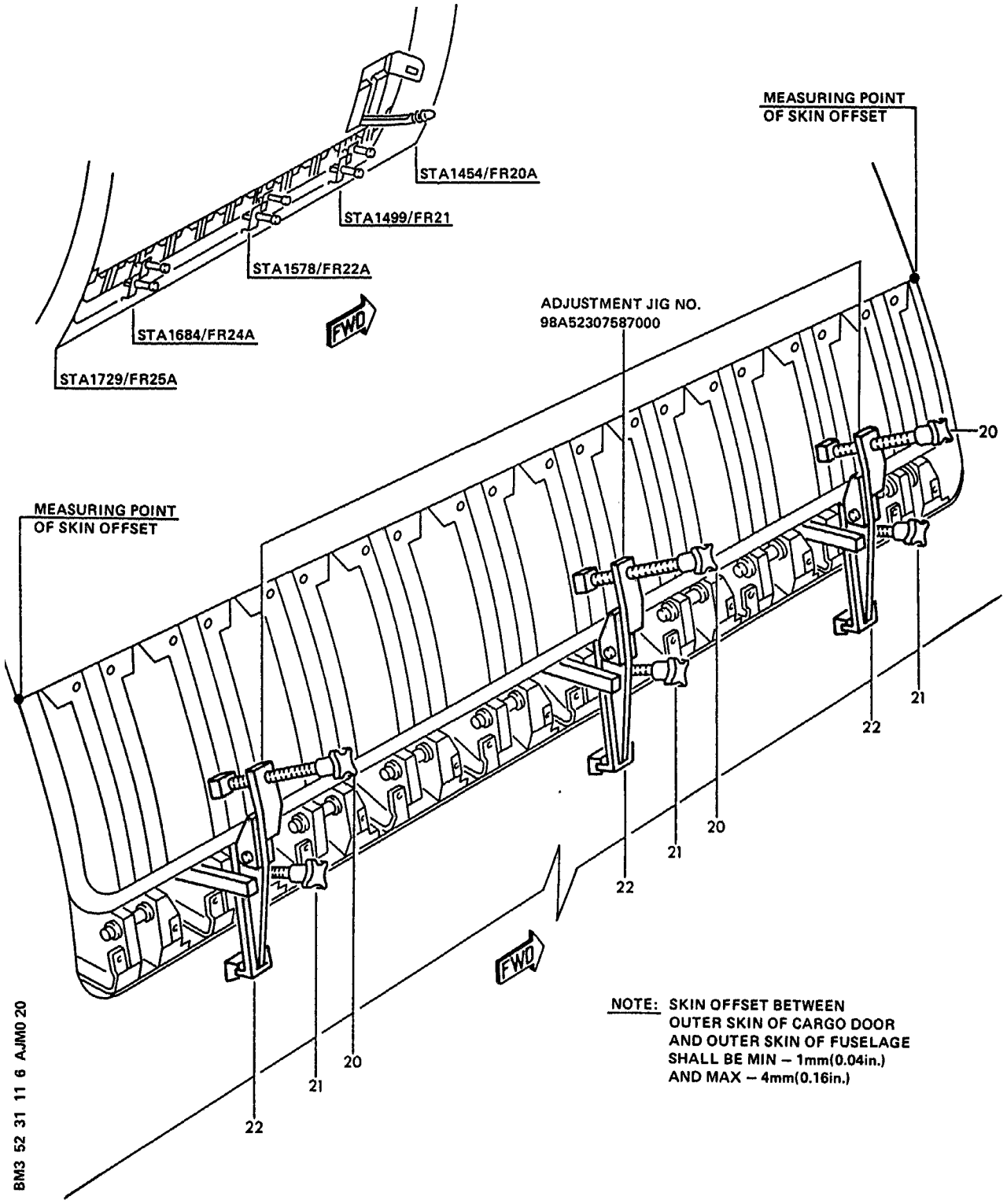
(d)Push operating handle slowly upwards to recess. Make certain that locking hooks (21) engage freely over eccentric bushes (20).

(e)Measure gaps "f" and "g" between eccentric bushes (20) and locking hooks (21). If gap "f" exceeds limit, carry out adjustment of eccentric bolts (28) and eccentric bushes (20) (Ref. 52-31-11, P. Block 501).

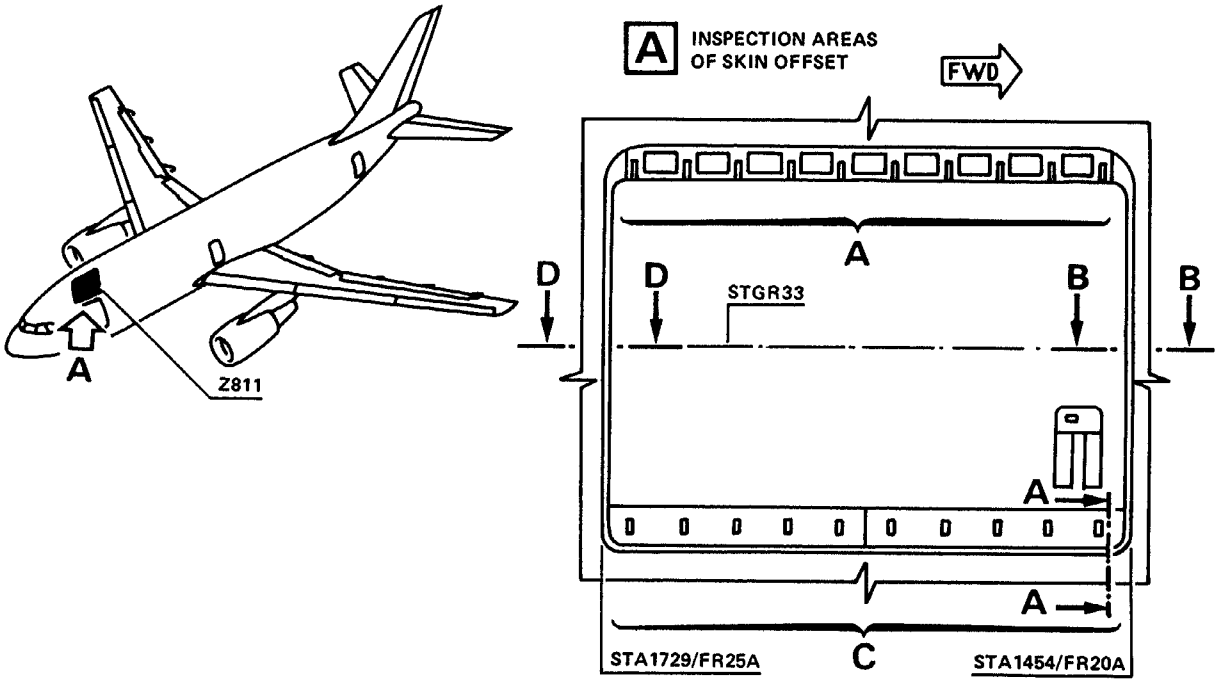
NOTE : Adjustment of gaps "f" and "g" is dependent on eccentric bolt (28) and eccentric bush (20). If gap "f" requires adjustment, initially position eccentric bolt (28) to give smallest permissible clearance of gap "g".

(f)Remove eccentric bush adjustment jig from FWD cargo compartment door.

(5) Measurement of Fits and Clearances



Mounting of Eccentric Bush Adjustment Jig
Figure 603



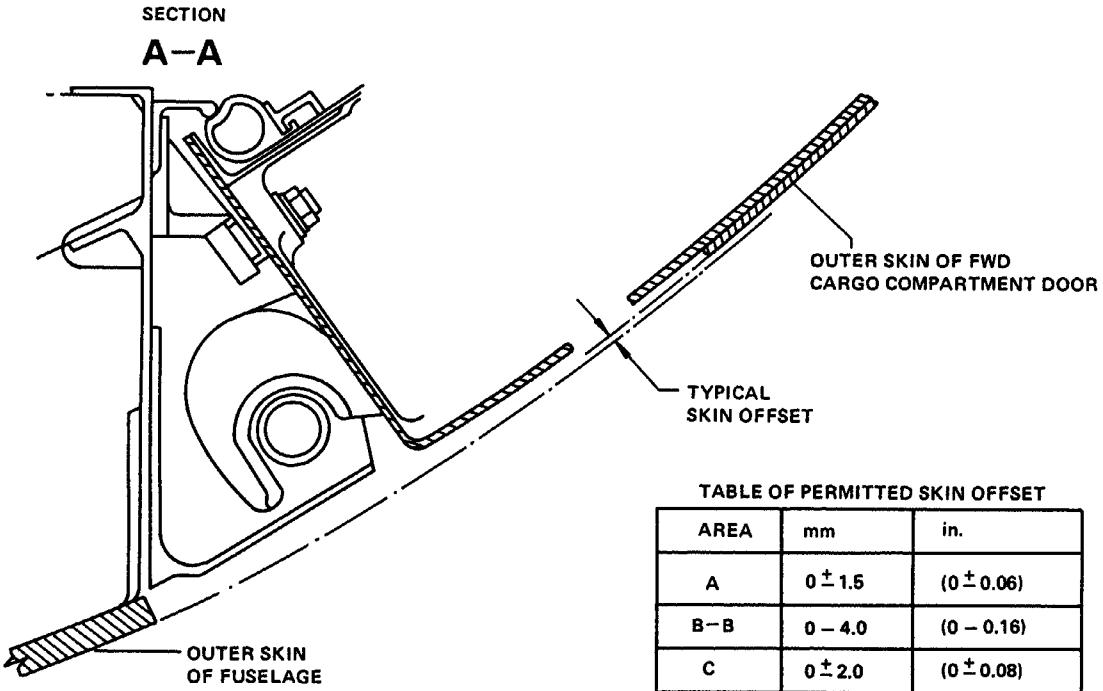


TABLE OF PERMITTED SKIN OFFSET

AREA	mm	in.
A	0 ± 1.5	(0 ± 0.06)
B–B	0 – 4.0	(0 – 0.16)
C	0 ± 2.0	(0 ± 0.08)
D–D	0 – 4.0	(0 – 0.16)

BM3 52 31 11 6 ALM0 00

Check of Skin Offset
Figure 604

(a)Measure fits and clearances of bolts and bushes (Refer to table following this topic).
(b)Install access covers 811AR and 811BR on FWD cargo compartment door.
(c)Install access covers 134BR thru 134FR on lower FWD cargo compartment door area.
(d)Measure clearance between lower edge of FWD cargo compartment door and access covers 134BR thru 134FR. Clearance must be 4 ±2 mm (0.157 ±0.08 in.).

**ON A/C 001-003,

(6)Operational Check of related Cargo Door Systems
(a)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(b)Make certain that FWD cargo compartment door opens and closes correctly. For adjustment of FWD cargo compartment door refer to 52-31-11, P. Block 501.
(c)Check that green indicator light on selector panel comes on when FWD cargo compartment door is fully opened and the door actuator is hydraulically locked (Ref. 52-35-00, P. Block 501).
(d)Check that FWD cargo compartment door can be locked correctly. For adjustment of locking mechanism ref. 52-30-21, P. Block 501).
(e)Carry out functional check of door warning system (Ref. 52-71-11, P. Block 501).

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(6)Operational Check of related Cargo Door Systems
(a)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(b)Make certain that FWD cargo compartment door opens and closes correctly. For adjustment of FWD cargo compartment door refer to 52-31-11, P. Block 501.
(c)Check that green indicator light on selector panel comes on when FWD cargo compartment door is fully opened and the door actuator is hydraulically locked (Ref. 52-35-00, P. Block 501).
(d)Check that FWD cargo compartment door can be locked correctly. For adjustment of locking mechanism ref. 52-30-21, P. Block 501).
(e)Carry out functional check of door warning system (Ref. 52-71-11, P. Block 501).
(f)Carry out functional check of residual pressure warning system (Ref. 52-73-00, P. Block 501).

**ON A/C ALL

C. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(2)Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(3)Make certain that water drain holes are clean and free from obstructions.
(4)Install insulation mats on FWD cargo compartment door (Ref. 52-30-13, P. Block 401).
(5)Close and lock FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(6)Install access cover 132AR thru 132LR on the upper FWD cargo compartment door area.
(7)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Remove access platform.

Fits and Clearances (Ref. Fig. 601, 602)

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max Allow Clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A ID2	20.000 (0.7874)	20.021 (0.7882)			20.021 (0.7882)	20.060 (0.7898)	
A			0.040 (0.0015)	0.094 (0.0037)			0.160 (0.0062)
OD3	19.927 (0.7845)	19.960 (0.7858)			19.900 (0.7835)	19.927 (0.7845)	
A ID1	20.000 (0.7874)	20.021 (0.7882)			20.021 (0.7882)	20.060 (0.7898)	
A			0.040 (0.0015)	0.094 (0.0037)			0.160 (0.0062)
OD3	19.927 (0.7845)	19.960 (0.7858)			19.900 (0.7835)	19.927 (0.7845)	
D/F ID7	18.000 (0.7086)	18.018 (0.7093)			18.018 (0.7093)	18.060 (0.7110)	
D/F			0.032 (0.0012)	0.077 (0.003)			0.160 (0.0062)
OD8	17.941 (0.7063)	17.968 (0.7074)			17.900 (0.7047)	17.941 (0.7063)	

Detail and item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max Allow Clear mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
D/F							
ID6	18.000 (0.7086)	18.018 (0.7093)			18.018 (0.7093)	18.060 (0.7110)	
D/F			0.032 (0.0012)	0.077 (0.003)			0.160 (0.0062)
OD8	17.941 (0.7063)	17.968 (0.7024)			17.900 (0.7047)	17.941 (0.7063)	
E							
1I12	19.030 (0.7492)	19.050 (0.7500)			19.050 (0.7500)	19.110 (0.7524)	
E			-0.005 (0.0002)	0.028 (0.0011)			0.110 (0.0043)
OD13	19.022 (0.7489)	19.035 (0.7494)			19.000 (0.7480)	19.022 (0.7489)	
E							
ID11	19.037 (0.7495)	19.050 (0.7500)			19.050 (0.7500)	19.095 (0.7518)	
E			0.002 (0.0001)	0.028 (0.0011)			0.065 (0.0025)
OD13	19.022 (0.7489)	19.035 (0.7494)			19.000 (0.7480)	19.022 (0.7489)	
C-C							
ID25	13.000 (0.5118)	13.018 (0.5125)			13.018 (0.5125)	13.043 (0.5135)	
C-C			0.016 (0.0006)	0.052 (0.0020)			0.098 (0.0039)
OD23	12.966 (0.5105)	12.984 (0.5112)			12.945 (0.5096)	12.966 (0.5105)	

Table 601

WARNING : MAINTENANCE WORK ON THE HYDRAULIC SYSTEM MUST NOT BE CARRIED OUT WHEN THE DOOR IS LOCKED OPEN.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR AFT CARGO COMPARTMENT DOORS (REF. 52-30-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B.	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
C.	Crane, Minimum Capacity 136 kg (300 lb)
D. 98A52208001001	Removal/Installation Tools - Cargo Compartment Doors
E. 98A52307529001	Sling - Cargo Doors
F.	Torque Wrench, up to 2.0 m.daN (177 lbf.in.)
G.	Circuit Breaker Safety Clips
H.	Cotter Pins
J.	Corrosion Resistant Steel Lockwire, 0.6 mm (0.024 in.) dia.
K. Material No. 04-004	Common Greases (Ref. 20-31-00)
L. Material No. 05-002	Special Materials (Ref. 20-31-00)
M. Material No. 05-027	Special Materials (Ref. 20-31-00)
N. Material No. 05-052	Special Materials (Ref. 20-31-00)
P. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 11-20-00, P. Block 1	Exterior Placards and Markings
- 20-28-11, P. Block 1	Electrical Bonding
- 24-41-00, P. Block 301	AC External Power Control
- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-32-11, P. Block 501	AFT Cargo Compartment Door
- 52-71-11, P. Block 501	Door Warning Switches

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

**ON A/C ALL

- 53-10-63, P. Block 401 Wing to Fuselage Fairings

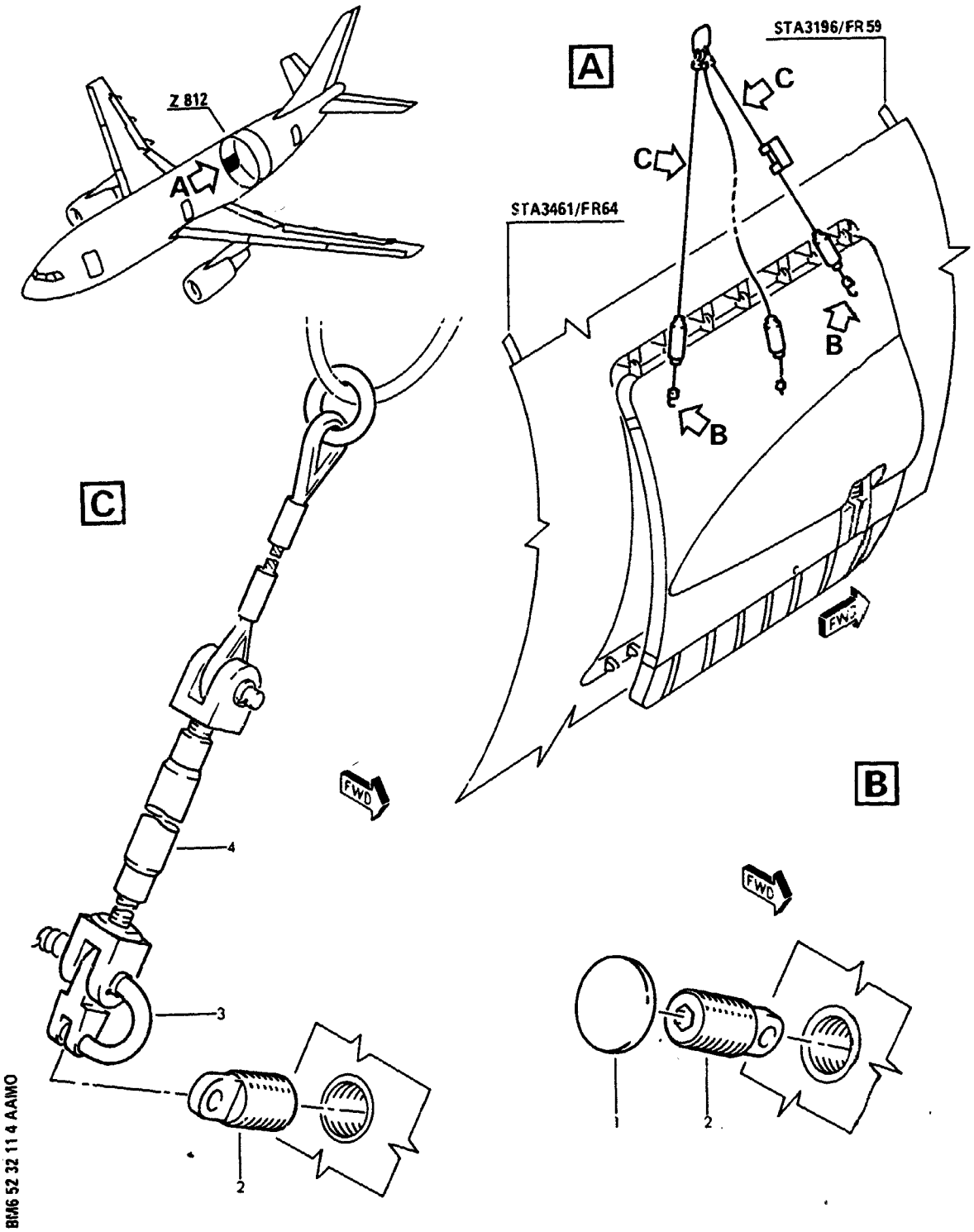
2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Remove access panels 812AR, 812BR, 152AR thru 152HR and 154AR thru 154CR.
(3)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(4)Make certain that electronics racks ventilation is correct.
(5)Unlock and open door approx. 30 degrees (Ref. 52-30-00, P. Block 1).
(6)Depressurize Yellow hydraulic system (Ref. 29-24-00, P. Block 301).
(7)Open, safety and tag the following circuit breakers:

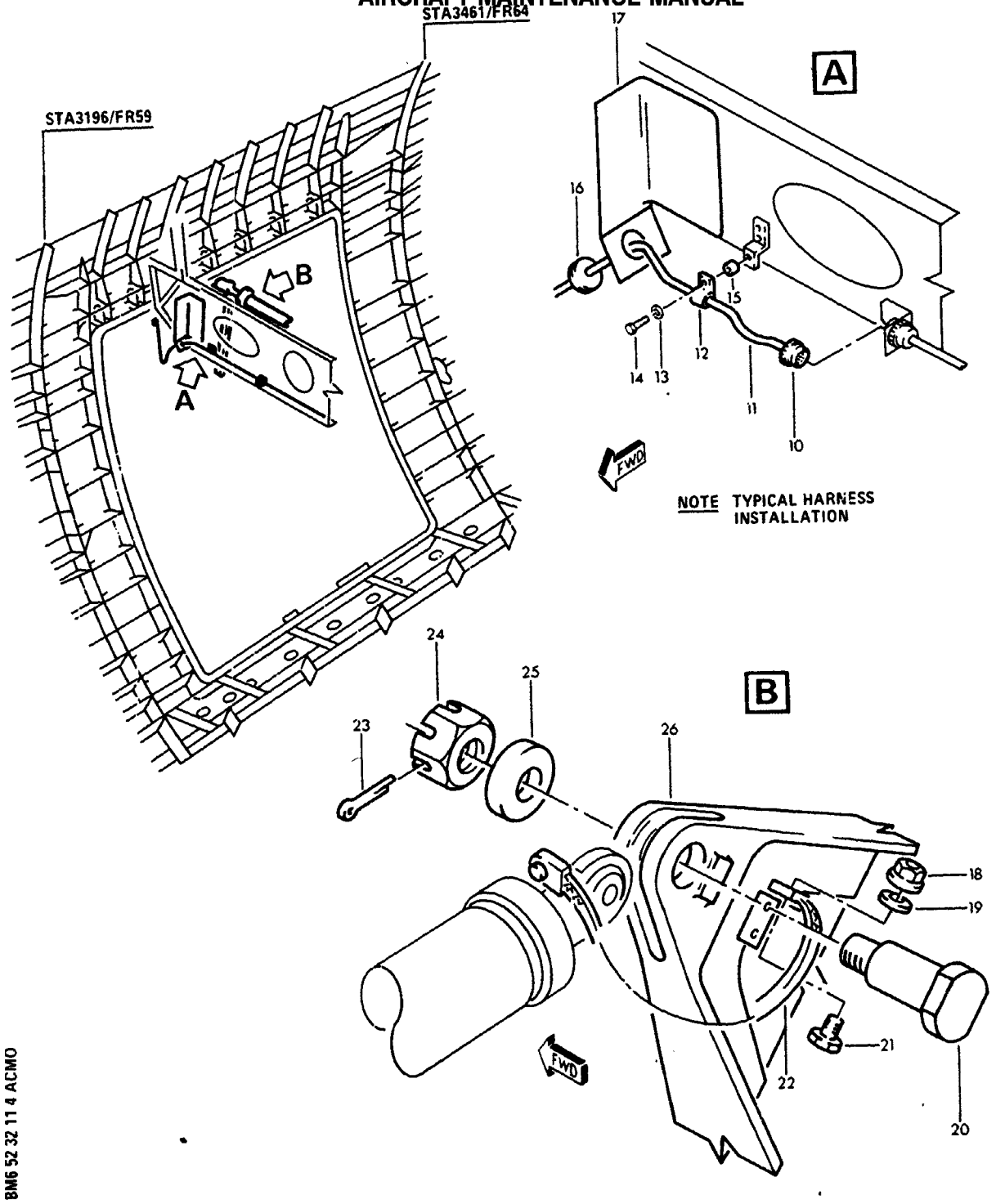
PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC/HYD PUMP	23GX	GEN2/B8
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(8)Remove cargo compartment ceiling panels.
(9)Install cargo door sling P/N 98A52307529000 (Ref. Fig. 401).
(a)Remove self-adhesive discs (1) covering hoisting points.
(b)Remove hoisting lugs (2) and install in reverse position in door.
(c)Position crane and attach cargo door sling (4) to upper hoisting lugs (2) with fasteners (3).
(d)Lift door sufficiently to remove load from door hinge bolts.

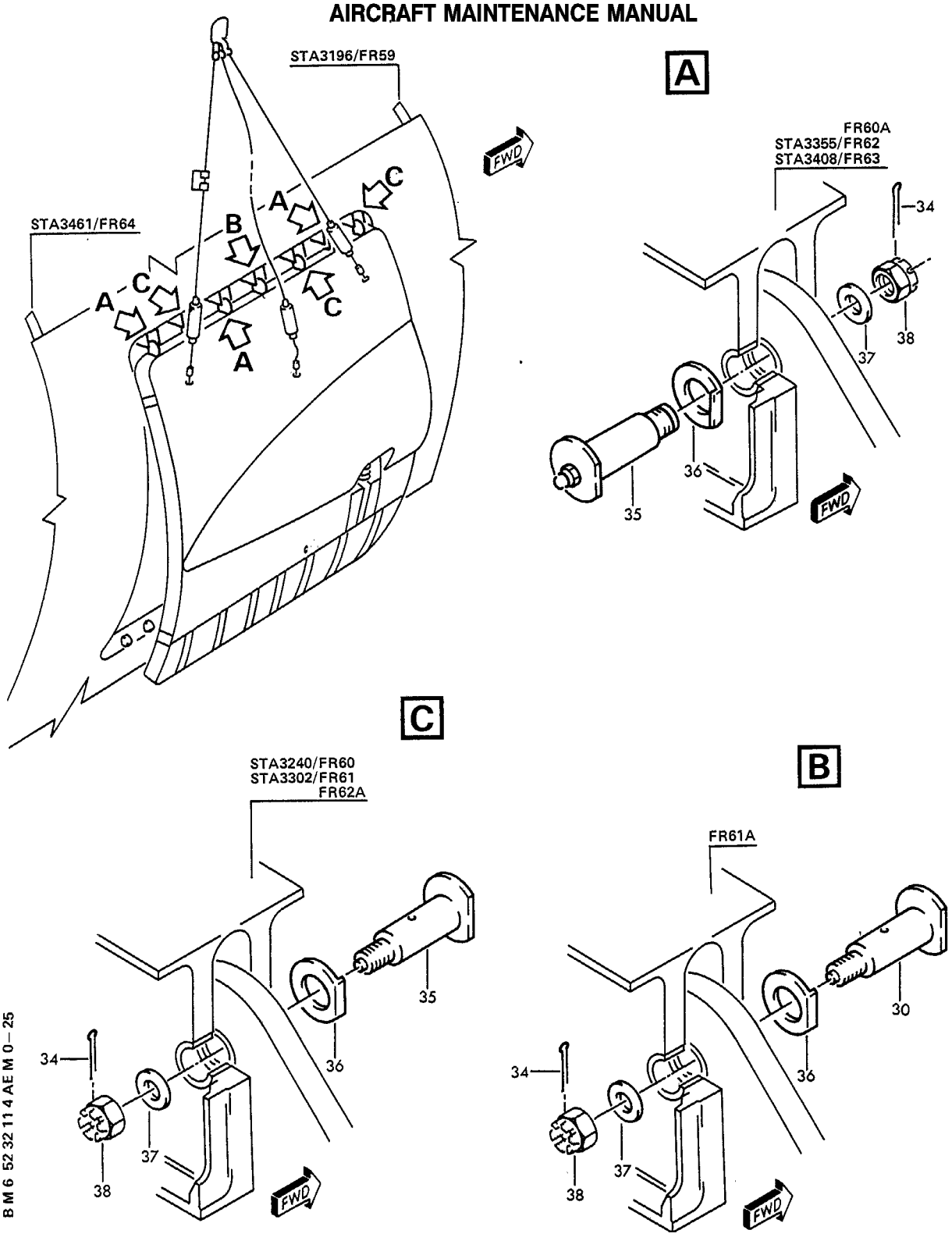
B. Removal (Ref. Fig. 402, 403, 404)
(1)Cut and remove lockwire and disconnect plug (10).
(2)Remove bolt (14), washer (13), distance piece (15) and cable clamp (12).
(3)Remove grommet (16) and cable (11) with plug (10) from bracket (17).
(4)Remove nut (18), washer (19), screw (21), and disconnect bonding strap (22).
CAUTION : SUPPORT DOOR ACTUATOR BEFORE REMOVING BOLT (20).
(5)Remove cotter pin (23), nut (24), washer (25), bolt (20) and disconnect door actuator.



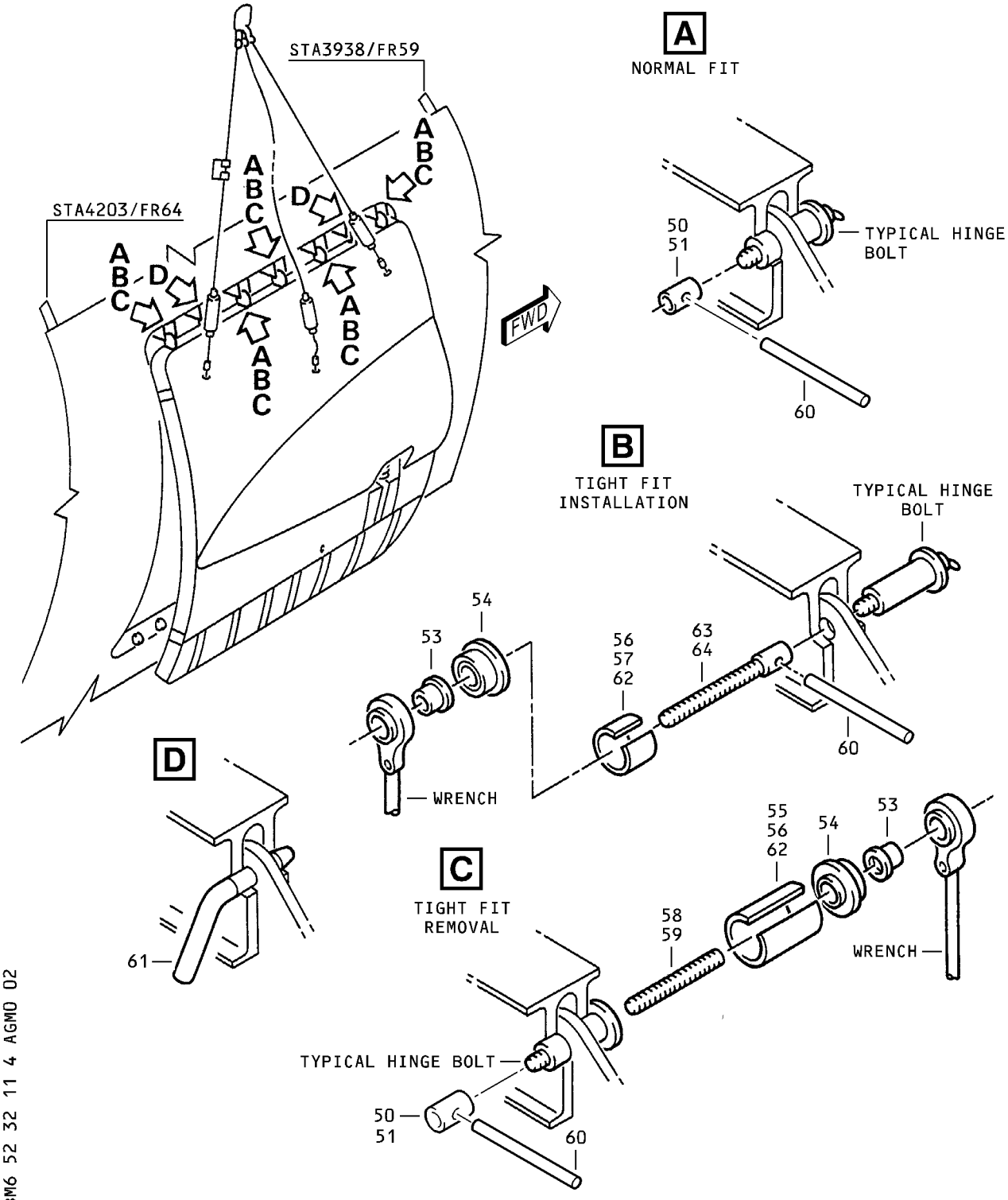
Sling Attachment
Figure 401



Cable and Actuator Connections
Figure 402



Hinge Bolts
Figure 403



Removal/Installation Tools
Figure 404

R

(6)Remove hinge bolts (30, 35)
(a)Remove cotter pins (34), nuts (38) and washers (37).
(7)Remove normal fitting bolts (30, 35) using the components of removal/installation tool P/N 98A52208001001 listed in Table 401.
(a)Install protective covers (50, 51).
(b)Remove hinge bolts (35) and lockwashers (36) from fittings at frames 60A and 62A and insert center pins (61).
(c)Remove remaining hinge bolts (35) and lockwashers (36).
(d)Remove hinge bolt (30) and lockwasher (36) from fittings at frame 61A.
(e)Remove protective covers (50, 51).
(8)Remove tight fitting bolts (30, 35) using the components of removal/installation tool P/N 98A52208001001 listed in Table 401.
(a)Remove grease nipples from hinge bolts (30, 35).
(b)Remove hinge bolts (30, 35) and lockwashers (36) in correct order using removal tools and insert center pins (61).
(9)Remove center pins (61).
CAUTION : DO NOT DAMAGE HINGE FITTINGS.
(10)Carefully move door away from frame fittings and lower onto a suitable support.
(11)Remove sling.

			REMOVAL		INSTALLATION	
	COMPONENT	ITEM	CENTER HINGE BOLT	OTHER HINGE BOLTS	CENTER HINGE BOLT	OTHER HINGE BOLTS
	CENTER PIN	61	---	98A52208001012	---	98A52208001012
R	PROTECTIVE COVER	50/51	98A52208001218	98A52208001216	---	---
R	LEVER	60	98A52208001238	98A52208001238	98A52208001238	98A52208001238
R	EXTRACTION SHAFT	58/59	98A52208001212	98A52208001214	---	---
R	INSERTION SHAFT	63/64	---	---	98A52208001210	98A52208001208
R	SLEEVE	55	98A52208001220	---	---	---
R	SLEEVE	56	---	98A52208001224	---	98A52208001224
R	SLEEVE	57	---	---	98A52208001222	---
R	SLEEVE	62	---	98A52208001226	---	98A52208001226
R	THRUST ASSY	54	98A52208001100	98A52208001100	98A52208001100	98A52208001100
R	NUT	53	98A52208001228	98A52208001228	98A52208001228	98A52208001228

Table 401

C. Preparation for Installation
(1)Make certain that grease channels in bolts (30, 35) are free from obstruction.
(2)Apply synthetic grease (Mat. No. 04-004) to door hinge bolts and bushes.
(3)Remove self-adhesive patches (1) covering hoisting points, remove hoisting lugs (2) and install in reverse position in door, if necessary.
(4)Remove and install wing to fuselage fairing from old door, on replacement door, if necessary (Ref. 53-10-63 P. Block 401).

D. Installation (Ref. Fig. 401, 402, 403)
(Ref. Fig. 404)
(1)Position crane and attach cargo door sling P/N 98A52307529000 to upper hoisting lugs (2) with fasteners (3).
CAUTION : DO NOT DAMAGE HINGE FITTINGS.
(2)Position door for installation.
(3)Align holes in hinge arms with holes in fuselage door frame fittings and insert center pins (61) in fittings at frames 60A and 62A.
(4)Install normal fitting bolts (30, 35) using the components of removal/installation tool P/N 98A52208001001 listed in Table 401.
(a)Install protective covers (50, 51) on hinge bolts (30, 35).
(b)Install lockwashers (36) and hinge bolts (35).
(c)Install lockwasher (36) and hinge bolt (30) in fittings at frame 61A.
(d)Remove center pins (61), install lockwashers (36) and hinge bolts (35).
(5)Install fitting bolts (30, 35) using the components of removal/installation tool P/N 98A52208001001 listed in Table 401.
(a)Install lockwashers (36) and hinge bolts (30, 35) in the correct order using installation tools.
(b)Remove center pins (61), install lockwashers (36) and hinge bolts (35), using installation tools.
(c)Install grease nipples on bolts (30, 35).
(6)Slacken hoisting sling (4).
(7)Install washers (37) and nuts (38). Do not tighten.
(8)Remove sling from upper hoisting lugs (2).
(9)TORQUE nuts (38) to 0.49 m.daN (43.4 lbf.in.) and safety with cotter pins (34).

(10)Attach cargo door sling P/N 98A52307529000 to lower hoisting lug (2).
CAUTION : DO NOT DAMAGE HINGE FITTINGS.
(11)Open cargo door to full extent, using crane and hoisting sling (4), and install support struts (Ref. 52-30-00, P. Block 301).
(12)Install cable (11), with plug (10) and grommet (16) to bracket (17).
(13)Apply corrosion-preventive paste (Mat. No. 05-002) to threads of bolts (14).
(14)Install distance piece (15), cable clamp (12), washer (13) and bolt (14).
(15)Connect plug (10) and safety with lockwire.
(16)Remove safety clips and tags, and close circuit breakers 7GX and 23GX.
(17)Fully extend actuator, using hand pump, and make certain that internal lock engages.
(18)Apply corrosion preventive paste (Mat. No. 05-002) to shaft of bolt (20).
(19)Apply corrosion preventive paste (Mat. No. 05-002) to thread of bolt (20)
(20)Align door actuator rod end with actuator attach fitting (26), and install bolt (20), washer (25) and nut (24).
(21)TORQUE nut (24) to 2.0 m.daN (177.0 lbf.in.) and safety with cotter pin (23).
(22)Install door actuator safety lock (Ref. 52-30-00, P. Block 301).
(23)Remove sling from door.
(24)Position bonding strap (22) and install with screw (21), washer (19) and nut (18). For electrical bonding refer to 20-28-11, P. Block 1.
(25)Remove door support struts (Ref. 52-30-00, P. Block 301).
(26)Select door OPEN and pressurize hydraulic system using hand pump to ensure there is no compression load on door actuator safety lock.
(27)Remove door actuator safety lock (Ref. 52-30-00, P. Block 301).
(28)Lubricate bolts (30, 35) with synthetic grease (Mat. No. 04-004), using grease gun.

E. Test
(1)Carry out adjustment/test of AFT cargo compartment door (Ref. 52-32-11, P. Block 501).
(2)Carry out operational test of door warning switch for AFT cargo compartment door (Ref. 52-71-11, P. Block 501).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

(3)Carry out operational test of residual pressure warning system for AFT cargo compartment door (Ref. 52-73-00, P. Block 501).

**ON A/C ALL

F. Close-Up
(1)Make certain that working area is clean, and clear of tools and miscellaneous items of equipment.
(2)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew as necessary (Ref. 51-75-10, P. Block 801).
(3)Install cargo compartment ceiling panels.
(4)Close and lock AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)Remove hoisting lugs (2) and degrease with cleaning agent (Mat. No. 11-004).
(6)Apply corrosion-preventive paste (Mat. No. 05-002) to hoisting lugs and install in reverse position in door flush with skin.
(7)Install self-adhesive discs (1) (Mat. No. 05-052) over hoisting points (Ref. 11-20-00, P. Block 1).
(8)Coat all thread ends with corrosion-preventive paste (Mat. No. 05-002).
(9)Install access panels 812AR, 812BR, 152AR thru 152HR and 154AR thru 154CR.
(10)Repair paint coating as necessary (Ref. 51-75-10, P. Block 801).
(11)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(12)Remove access platform.

1. Reasons for the Job

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR AFT CARGO COMPARTMENT DOORS (REF. 52-30-00, P. BLOCK 301).

A. After replacement of any door fitting and/or door frame fitting.

B. After replacement of AFT cargo compartment door, either replacement of original door or of an overhauled item.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B.	Electrical Ground Power Unit - 3-Phase, 115/220 V, 400 Hz
C. 98A52307579000	Jig - Eccentric Bushing Adjustment, AFT Cargo Compartment Door
D.	Torque Wrench, 1.0 m.daN (88.5 lbf.in.)
E.	Feeler Gage
F.	Circuit Breaker Safety Clips
G.	Cotter Pins
H.	Tabwashers
J.	Shims for Stop Angle Plates
K.	Packing Plate, 1.4 mm (0.055 in.) thick
L.	Warning Notices
M. Material No. 05-002	Special Materials (Ref. 20-31-00)
N. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-30-31, P. Block 401	FWD, AFT Cargo Door Latch and Stop Fittings
- 52-35-00, P. Block 501	Electrical Control System
- 52-71-11, P. Block 501	Door Warning Switches

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

R **ON A/C ALL

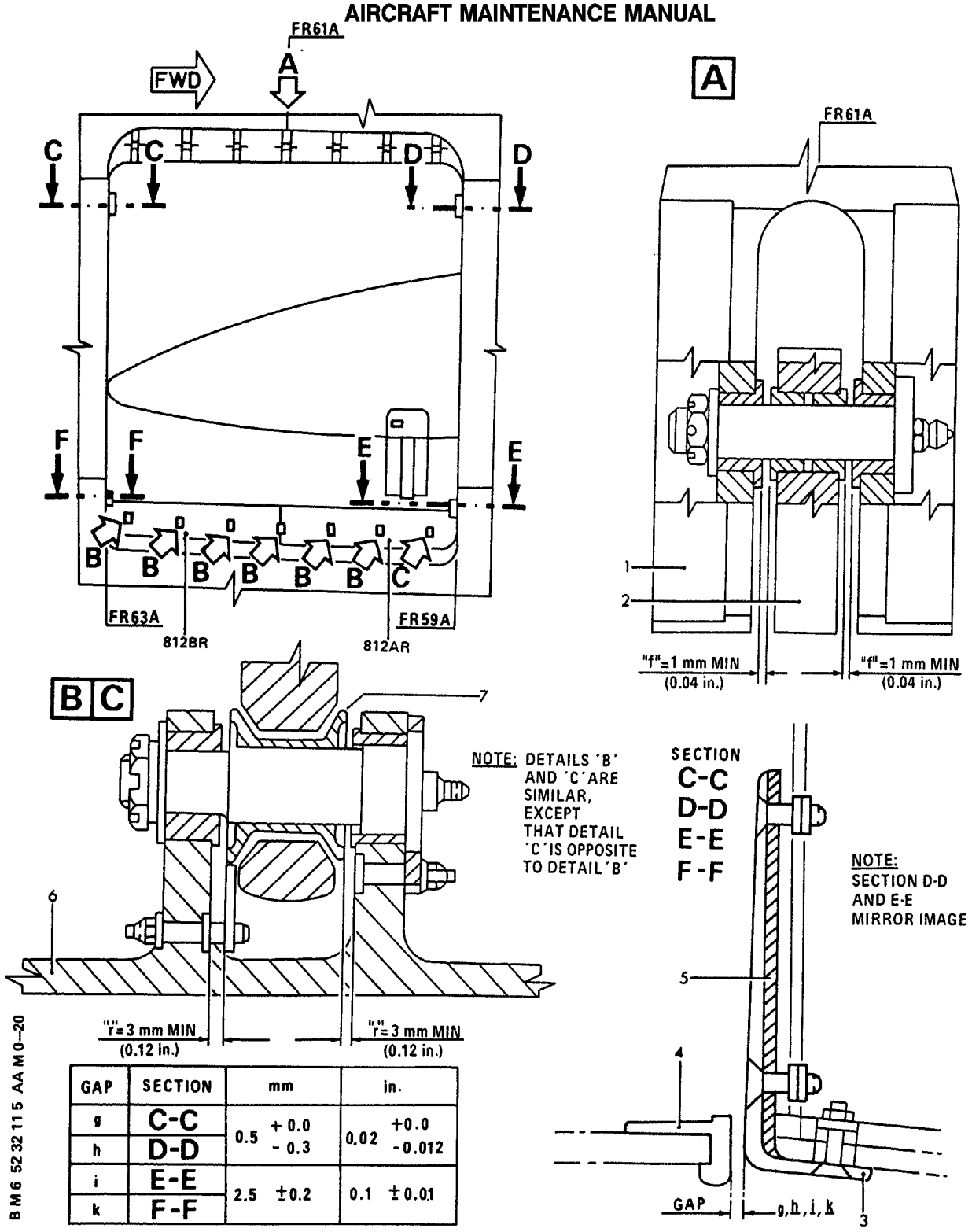
3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Remove access panels 812AR, 812BR, 152AR thru 152HR and 154AR thru 154CR.
(3)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(4)Make certain that electronics racks ventilation is correct.
(5)Unlock and open AFT cargo compartment door approx. 30 degrees (Ref. 52-30-00, P. Block 1).
(6)Depressurize Yellow Auxiliary Power hydraulic system (Ref. 29-24-00, P. Block 301).
(7)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC/HYD PUMP	23GX	GEN2/B8
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

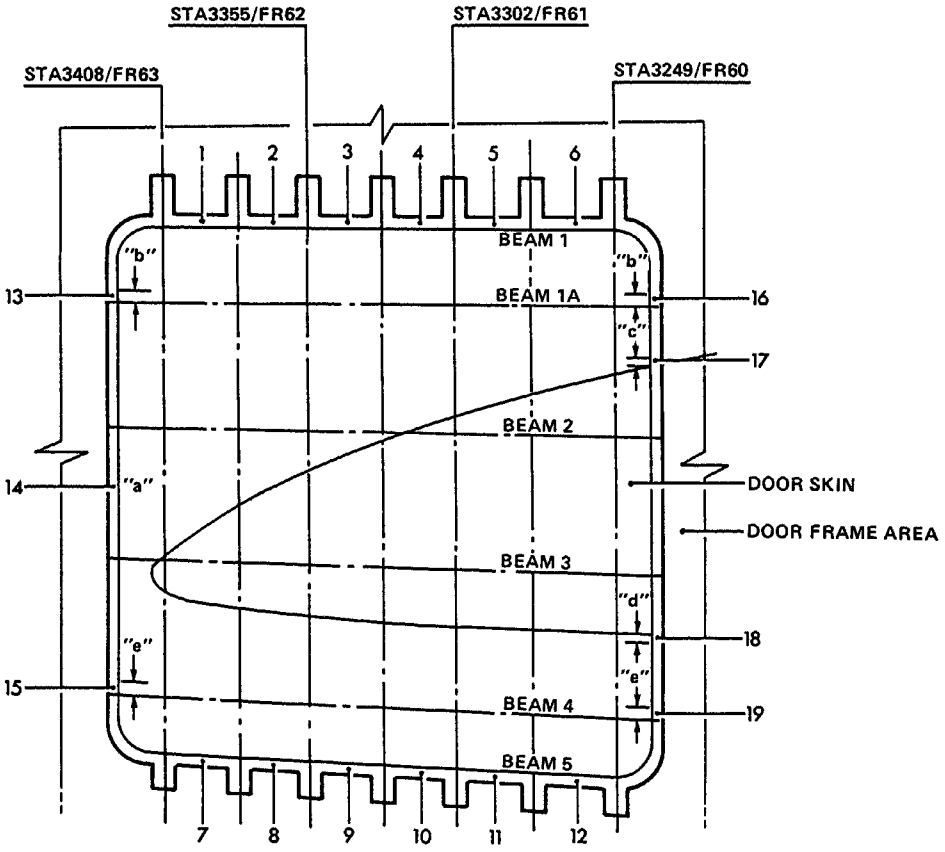
(8)Display warning notices prohibiting operation of cargo compartment doors.

B. Adjustment of Gaps - Cargo Compartment Door/Fuselage
(Ref. Fig. 501, 502).
(1)Adjust gaps 'f' at FR61A and gap between door and door frame skin LH and RH.
(a)Make certain that operating handle is in fully open position.
(b)Close but do not lock door.
(c)Push door flush with fuselage contour and check that gaps 'f' between flange of bush in center hinge arm (2) and flange of bush in fuselage frame fitting (1), are equal and not less than 1.0 mm (0.04 in.).
1 Should stated limit be exceeded, remove or install shims (5) as required.
(2)Adjust gaps between door and fuselage.
NOTE : Before carrying out the following adjustment, secure door, at FR61A in central position using spacers between bush in hinge arm and bush in frame fitting.
(a)Close and lock door.
CAUTION : GAP 'r' MUST NOT BE LESS THAN 3.0 mm (0.12 in.) AT ANY LOCATION.
(b)Measure gap 'r' between eccentric bushes (7) and lock fittings (6) at all frames.
CAUTION : GAP 'f' MUST NOT BE LESS THAN 1.0 mm (0.04 in.) AT ANY LOCATION.
(c)If gap 'r' exceeds limit, unlock and open door and amend door center position.



GAP	SECTION	mm	in.
g	C-C	0.5 +0.0 -0.3	0.02 +0.0 -0.012
h	D-D		
i	E-E	2.5 ±0.2	0.1 ±0.01
k	F-F		

Gaps - AFT Cargo Compartment Door/Fuselage
Figure 501



MEASURING POINT	DISTANCE			GAP		SKIN OFFSET	
		mm	in.	mm	in.	mm	in.
1 – 6						0 + 0.8 – 2.2	0 + 0.032 – 0.087
7 – 12						0 + 1.2 – 1.8	0 + 0.047 – 0.071
13	"b"	60	2.362	5 ± 2	0.197 ± 0.787	0 + 0.3 – 2.7	0 + 0.012 – 0.106
14	"a"	MIDDLE DOOR				0 – 1.0 – 4.0	0 + 0.039 – 0.158
15	"e"	60	2.362			0 + 0.1 – 2.9	0 + 0.004 – 0.114
16	"b"	60	2.362			0 + 0.3 – 2.7	0 + 0.012 – 0.106
17	"c"	10	0.394			0 – 0.4 – 3.4	0 – 0.016 – 0.134
18	"d"	10	0.394			0 – 0.7 – 3.7	0 – 0.028 – 0.146
19	"e"	60	2.362			0 + 0.1 – 2.9	0 + 0.004 – 0.114

BM6 52 32 11 5 ABMO 00

Gaps and Skin Offset - AFT Cargo Compartment Door
Figure 502

(d)Measure gap 'g' and gap 'h' between stop angle plates (3) at door and stops (4) at fuselage door frame. Gap 'g' and gap 'h' must be 0.5 + 0.0 - 0.3 mm (0.02 + 0.0 - 0.012 in.).

(e)If gap 'g' and/or gap 'h' exceeds limits, adjust gap 'g' and/or gap 'h' by adding or removing shims (5) (Ref. 52-30-31, P. Block 401).

(f)Measure gap 'i' and gap 'k' between stop angle plates (3) at door and stops (4) at fuselage door frame. Gap 'i' and gap 'k' must be 2.5 ± 0.2 mm (0.1 ± 0.01 in.).

(g)If gap 'i' and/or 'k' exceeds limits, adjust gap 'i' and/or gap 'k' by adding or removing shims (5) (Ref. 52-30-31, P. Block 401).

NOTE : Make sure that gaps 'g', 'h', 'i' and 'k' (Ref. Fig. 501) are in accordance with gaps between door and door frame skin LH and RH (Ref. Fig. 502).

(h)Remove spacers at FR61A.

NOTE : After removal of spacers at FR61A, door is free to move forward or aft to contact forward or aft stop plates.

** ON OVERHAULED DOORS

C. Adjustment of Door Locking Mechanism

CAUTION : THE LOCKING MECHANISM OF OVERHAULED DOORS CAN ONLY BE FINALLY ADJUSTED WHEN THE DOOR IS INSTALLED ON THE AIRCRAFT. SECURING AND SAFETYING OF THE LOCKING MECHANISM MUST BE CARRIED OUT DURING THE FINAL ADJUSTMENT OR AFTER THE TEST.

(1)Check that dead centers are properly adjusted (Ref. 52-30-21, P. Block 501).

(2)Check that clearance between bellcrank and stop is within tolerance when operating handle is in fully open position (Ref. 52-30-21, P. Block 501).

(3)Make certain that indicator flags are flush with door skin (Ref. 52-30-21, P. Block 501).

(4)Make certain that locking units and hardware on all frames are secure and safetied.

** ON ALL DOORS

D. Adjustment of Locking Function

(1)Adjust stop bolts (Ref. Fig. 503, 502, 504).

CAUTION : THE SHORTEST RADIUS OF STOP BOLT ECCENTRIC HEAD MUST BE POSITIONED NEXT TO STOP FITTING (15).

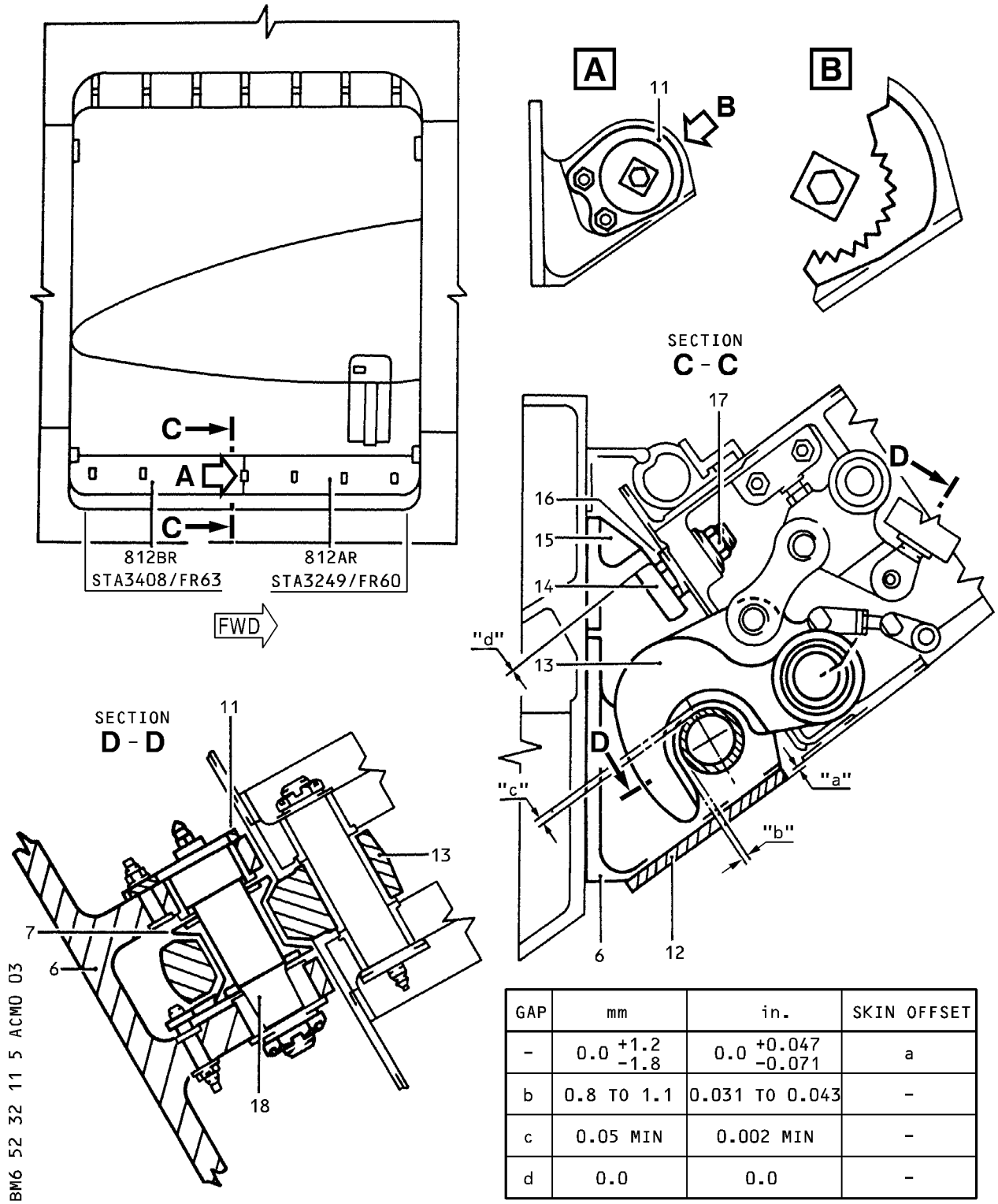
(a)Remove stop bolts (14), install with new tabwashers (16) and hand tighten nuts (17) (Ref. 52-30-31, P. Block 401).

(b)Close and lock door.

(c)Position adjustment jig P/N 98A52307579000 on door structure.

NOTE : Adjustment screw (20) is braced against door, and arm (22) is braced against fuselage contour.

(d)Adjust door with adjustment jig by turning adjustment screws (20, 21) until lower edge of door is flush with fuselage contour within skin offset in accordance with table (Ref. Fig. 502).

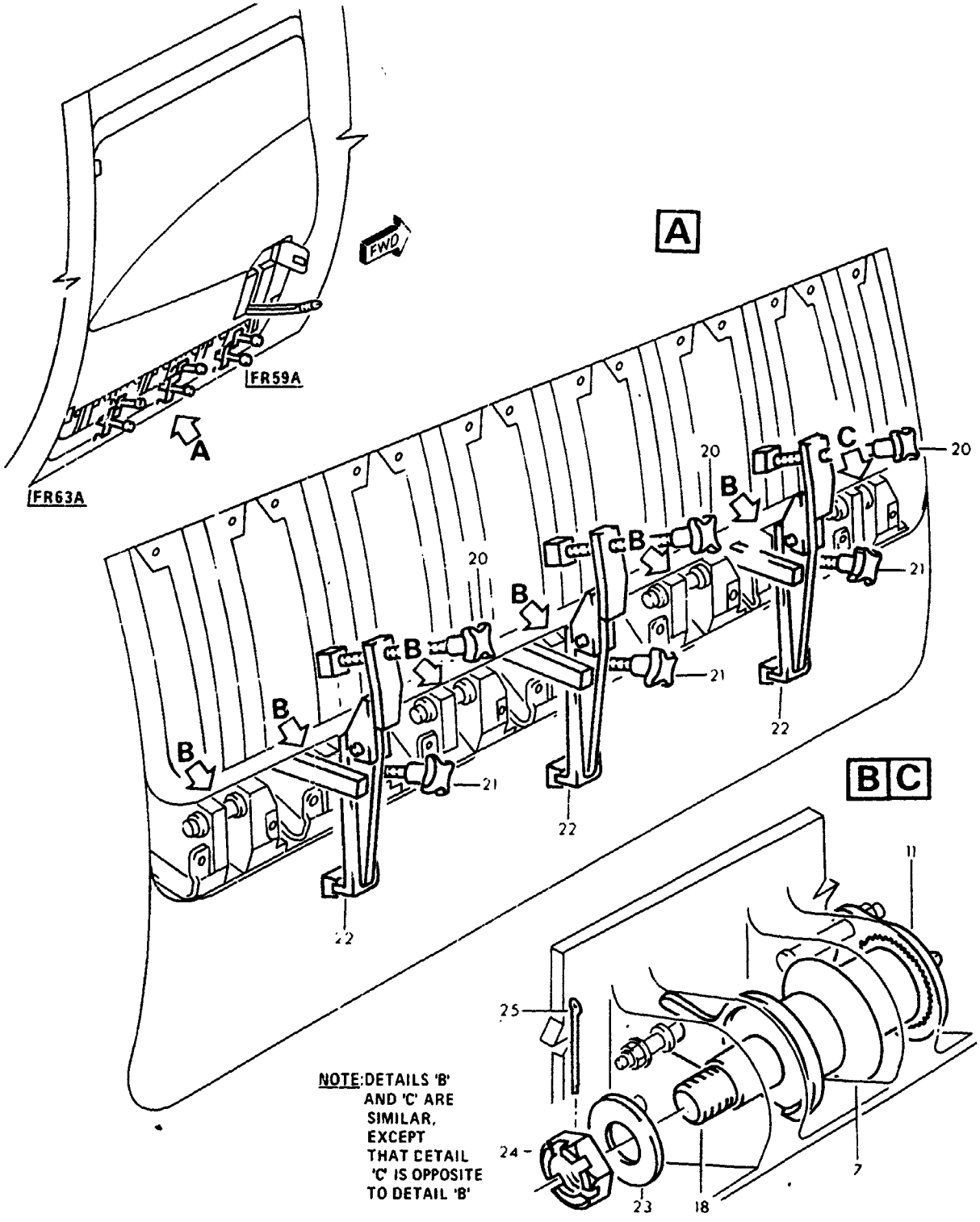


GAP	mm	in.	SKIN OFFSET
-	0.0 +1.2 -1.8	0.0 +0.047 -0.071	a
b	0.8 TO 1.1	0.031 TO 0.043	-
c	0.05 MIN	0.002 MIN	-
d	0.0	0.0	-

BM6 52 32 11 5 ACMO 03

Locking Function - AFT Cargo Compartment Door
Figure 503

R



Eccentric Bush Adjustment Jig
Figure 504

NOTE : When carrying out measurement use a packing plate (12) 1.4 mm (0.055 in.) thick to compensate for the removed access covers 154AR thru 154CR. Place packing plate (12) on exposed side of lock fittings (6).

(e)Adjust gaps 'd' between stop bolts (14) and stop fittings (15) to zero, by turning stop bolts (14) accordingly.
(f)Tighten nuts (17) and safety stop bolts (14) with tabwashers (16).
(g)Remove adjustment jigs and open door.
(2)Adjust eccentric bolts and bushes (Ref. Fig. 503, 504).
(a)Remove cotter pins (25), nuts (24) and washers (23).
(b)Press eccentric bolts (18) out of serrated plates (11) but do not remove accentric bolts (18).
(c)Close and lock door.
(d)Install adjustment jigs P/N 98A52307579000.
(e)Check that gaps 'd' remains at zero. Adjust stop bolts (14) if necessary (Ref. Para. D. (1)).
(f)Check that gaps 'b' between eccentric bushes (7) and locking hooks (13), are between 0.8 and 1.1 mm (0.031 and 0.043 in.).
(g)Check that gaps 'c' between eccentric bushes (7) and locking hooks (13), are not less than 0.05 mm (0.002 in.).
(h)Should stated limits for gaps 'b' and 'c' be exceeded, adjust gaps by turning eccentric bolts (18).
NOTE : The adjustment of gaps 'b' and 'c' at each location is dependent on eccentric bolt (18). To obtain gap 'b', choose position of the eccentric bolt (18) which gives the smallest gap 'c'.
(j)Press eccentric bolts (18) into serrated plates (11).
(k)Check that eccentric bushes (7) move freely on eccentric bolts (18).
(l)Remove adjustment jigs P/N 98A52307579000.
(m)Open door.
(n)Install washers (23) and nuts (24).
(p)Close and open door. Check that mechanism operates smoothly.
R (q)TORQUE nuts (24) to 0.49 m.daN (43.37 lbf.in.) and safety them with
R new cotter pins (25).

E. Test
(1)Remove safety clips and tags, and close circuit breakers 7GX and 23GX.
(2)Remove warning notices and pressurize Yellow Auxiliary Power hydraulic system by means of electric pump or hand pump.
NOTE : Pressurization of the Yellow Auxiliary Power hydraulic system (electric pump) in accordance with 29-24-00, P. Block 301, is to be preferred.
(3)Check that operating handle locks in closed position.
(4)Check that all indicator flags are flush with door skin. (Ref. 52-30-21, P. Block 501).
(5)Check that door seal is sufficiently compressed throughout its length.
(6)Unlock and open door. Door must open smoothly and without sticking.

(7)Close and lock door. Door must close easily and smoothly and lock without undue force.
(8)Measure force required to operate operating handle. Operating force must not exceed 15.0 daN (34.0 lbf.).
(9)Open and close door and make certain that green indicator light on selector panel is on with door open at end of opening process and is off with door closed (Ref. 52-35-00, P. Block 501).
(10)Carry out operational test of door warning switches for AFT cargo compartment door (Ref. 52-71-11, P. Block 501).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

(11)Carry out operational test of residual pressure warning system for AFT cargo compartment door (Ref. 52-73-00, P. Block 501).

**ON A/C ALL

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew if necessary (Ref. 51-75-10, P. Block 801).
(3)Coat all thread ends with corrosion-preventive paste (Mat. No. 05-002).
(4)Close and lock AFT cargo compartment door.
(5)Install access panels 812AR, 812BR, 152AR thru 152HR and 154AR thru 154CR.
(6)Repair paint coating as necessary (Ref. 51-75-10, P. Block 801).
(7)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(8)Remove access platform.

NOTE : Should a defect be suspected during the following inspection check, an approved nondestructive test must be carried out. If a defect is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

1. Cargo Compartment Door - General Check

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT
R MAINTENANCE ON OR NEAR AFT CARGO COMPARTMENT DOORS (REF. 52-30-00,
R P. BLOCK 301).

A. Reasons for the Job
(1)Inspection to determine that door and door fittings are free from damage.
(2)Measurement of fits and clearances to make certain that door components are free from excessive wear.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.3 m (7.50 ft.)
(2)	Electrical Ground Power Unit - 3-Phase, 115/200 V, 400 Hz
(3)	Circuit Breaker Safety Clips
(4)Material No. 05-002	Special Materials (Ref. 20-31-00)
(5)Material No. 05-027	Special Materials (Ref. 20-31-00)
(6)Material No. 08-001	Bonding and Adhesive Compounds (Ref. 20-31-00)
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-30-13, P. Block 401	FWD, AFT Cargo Door Lining and Insulation
- 52-30-18, P. Block 401	Seal
- 52-30-21, P. Block 401	FWD, AFT Cargo Door Locking Mechanism
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-30-31, P. Block 401	FWD, AFT Cargo Door Latch and Stop Fittings
- 52-32-11, P. Block 401	AFT Cargo Compartment Door
- 52-32-11, P. Block 501	AFT Cargo Compartment Door
- 52-33-18, P. Block 401	Door Actuator
- 52-35-00, P. Block 501	Electrical Control System
- 52-71-11, P. Block 501	Door Warning Switches
- 53-10-63, P. Block 401	Wing to Fuselage Fairings
R	Nondestructive Testing Manual (NTM)
R	Structural Repair Manual (SRM)

C. Procedure

(1)Job Set-Up

(a)Position access platform.

(b)Remove access panels 812AR, 812BR, 152AR thru 152HR and 154AR thru 154CR.

(c)Remove wing to fuselage fairings (Ref. 53-10-63, P. Block 401).

(d)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(e)Make certain that electronics racks ventilation is correct.

(f)Open AFT cargo compartment door and secure with safety lock (Ref. 52-30-00, P. Block 301).

(g)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC/HYD PUMP	23GX	GEN2/B8
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

(h)Depressurize yellow hydraulic system (Ref. 29-24-00, P. Block 301).

(j)Remove insulation mats or fire protection linings from AFT cargo door (Ref. 52-30-13, P. Block 401).

(2)Inspection

(a)The following areas have specific damage criteria:

1 Frames

2 Fuselage frame fittings

R 3 Door skin

R 4 Internal structure

R 5 For the damage limits for steps 1 to 4 refer to

R SRM 52-30-00, P Block 101.

(b)Should damage limits be exceeded, a structural repair must be carried out, or component must be replaced.

1 For the removal of scratches, marks and dents refer to 51-73-10, P. Block 801.

2 For the removal of corrosion refer to 51-74-10, P. Block 801.

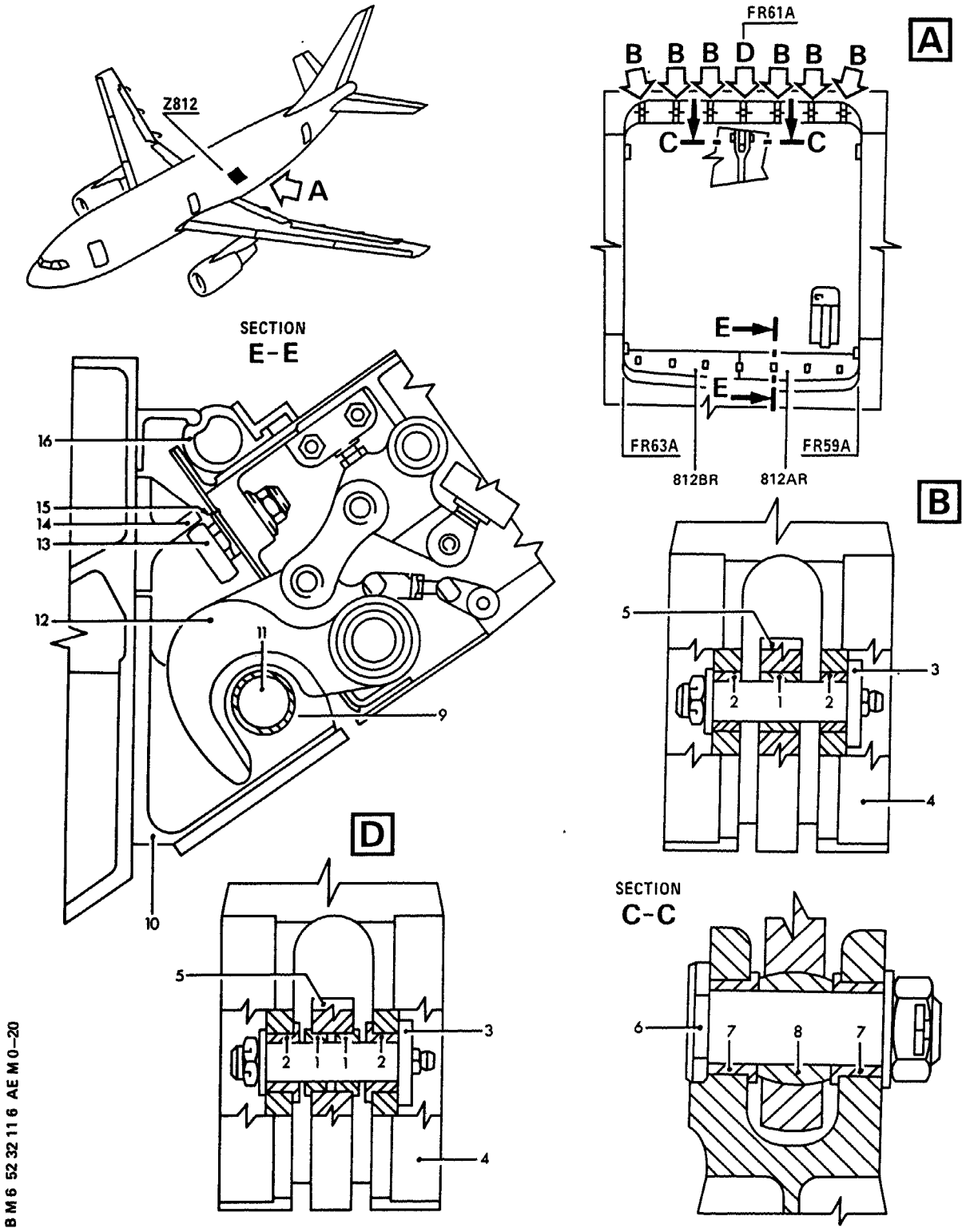
3 For the repair of paint coatings refer to 51-75-10, P. Block 801.

4 For the repair of sealing refer to 51-76-10, P. Block 801.

(c)Inspect all internal and external structural components and areas for damage, cracks, loose or missing rivets, corrosion, condition of sealant and paint.

1 Pay special attention to the following (Ref. Fig. 601):

- Door hinge fittings (5) and fuselage frame fittings (4) for damage-free surface, especially for cracks.
- Security of attachment and damage-free surface at hinge arm bushes (1, 2) and hinge bolts (3). For removal of bolts (3) refer to 52-32-11, P. Block 401.
- Security of attachment and damage-free surface at actuator attach fitting bushes (7, 8) and bolt (6).
- Actuator attachment structure for damage-free surface.
- Lift rubber seal-flap from drain valves at longerons 3 and 4 and check that drain holes are clean and clear from obstructions.



BM6 52 32 11 6 AE M0-20

Hinge and Lock Fittings
Figure 601

- Check drain valves for damage and missing parts.
- Check that rubber seal-flaps of drain valves are in good condition and replace if necessary.
- Check rubber seal-flap for security of attachment.
- Check fillet in areas of drain valves and renew with filler (Mat. No. 08-001) if necessary.
- Sealant bead of seal retainers. For renewal of sealant bead refer to 52-30-18, P. Block 401.

(d)Inspect AFT cargo compartment door locking components as follows: (Ref. Fig. 601)

1 Stop bolts (13) for security of attachment. Loose stop bolts must be safetied with new tabwashers (15) (Ref. 52-30-31, P. Block 401).

2 Locking hooks (12) for security of attachment and damage-free surface. For removal of locking hooks refer to 52-30-21, P. Block 401.

3 Lock fittings (10) and stop fittings (14) for security of attachment and damage-free surface.

4 Eccentric bolts (11) and eccentric bushes (9) for security of attachment and damage-free surface. For removal of eccentric bolts and bushes refer to 52-30-31, P. Block 401.

5 Door seal (16) for cuts, chafe marks, wear and security of attachment. For removal of door seal refer to 52-30-18, P. Block 401.

6 Remove door actuator safety lock (Ref. 52-30-00, P. Block 301), close and lock door and check that bulb section compresses door seal (16) all round.

(e)Measurement of Fits and Clearances

1 Measure fits and clearances of bolts and bushes. Refer to Table 601. For removal of bolts and bushes refer to 52-30-31, P. Block 401, 52-32-11, P. Block 401 and 52-33-18, P. Block 401.

Fits and Clearances (Ref. Fig. 601)

Detail and Item No.	Original Mfg Limits				In-Service Wear Limits		
	Dimension mm (in.)		Assy. Clearance mm (in.)		Dimension Limits mm (in.)		Max. Allow. Clear. mm (in.)
	Min.	Max.	Min.	Max.	Min.	Max.	
A,B ID 2	20.000 (0.7874)	20.033 (0.7887)			20.033 (0.7887)	20.075 (0.7904)	
			0.020 (0.0008)	0.074 (0.0029)			0.145 (0.0057)
A,B OD 3	19.959 (0.7858)	19.980 (0.7866)			19.930 (0.7846)	19.959 (0.7858)	
A,B ID 1	20.000 (0.7874)	20.021 (0.7882)			20.021 (0.7882)	20.050 (0.7892)	
			0.020 (0.0008)	0.062 (0.0024)			0.115 (0.0047)
A,B OD 3	19.959 (0.7858)	19.980 (0.7866)			19.935 (0.7848)	19.959 (0.7858	
C-C ID 8	19.037 (0.7495)	19.050 (0.7500)			19.050 (0.7500)	19.065 (0.7506)	
			0.002 (0.0001)	0.028 (0.0011)			0.055 (0.0022)
C-C OD 6	19.022 (0.7489)	19.035 (0.7494)			19.010 (0.7484)	19.022 (0.7489)	

Table 601

(3)Operational Check of Door Systems
  (a)Remove safety clips and tags, and close circuit breakers 7GX and 23GX.
  (b)Pressurize yellow hydraulic system (Ref. 29-24-00, P. Block 301).
  (c)Make certain that door opens, closes and locks correctly. Adjustment of door (Ref. 52-32-11, P. Block 501). Adjustment of locking mechanism (Ref. 52-30-21, P. Block 501).
  (d)Check that green indicator light on selector panel is illuminated, when door is locked open (Ref. 52-35-00, P. Block 501).
  (e)Carry out check of cargo door warning system (Ref. 52-71-11, P. Block 501).

(4)Close-Up
(a)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(b)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and renew if necessary (Ref. 51-75-10, P. Block 801).
(c)Coat all thread ends with corrosion-preventive paste (Mat. No. 05-002).
(d)Install insulation mats or fire protection linings to AFT cargo door (Ref. 52-30-13, P. Block 401).
(e)Install access panels 812AR, 812BR, 152AR thru 152HR and 154AR thru 154CR.
(f)Repair paint coating as necessary (Ref. 51-75-10, P. Block 801).
(g)Install wing to fuselage fairing (Ref. 53-10-63, P. Block 401).
(h)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(j)Remove access platform.

CAGO COMPARTMENT DOOR HYDRAULIC SYSTEM - DESCRIPTION AND OPERATION

1. General

The FWD and AFT cargo compartment doors are mechanically locked or unlocked and hydraulically opened or closed. The hydraulic system of FWD and AFT cargo compartment door (door hydraulic system) is connected to the yellow hydraulic system. Operating pressure is 3000 psi (206 bar).

If the electric pump fails, the system can be pressurized by a hand pump.

WARNING : THE HYDRAULIC SYSTEM IS FILLED WITH HYDRAULIC FLUID ACCORDING TO NSA 307110 (SKYDROL LD4, HYJET IV ETC).

2. Component Location

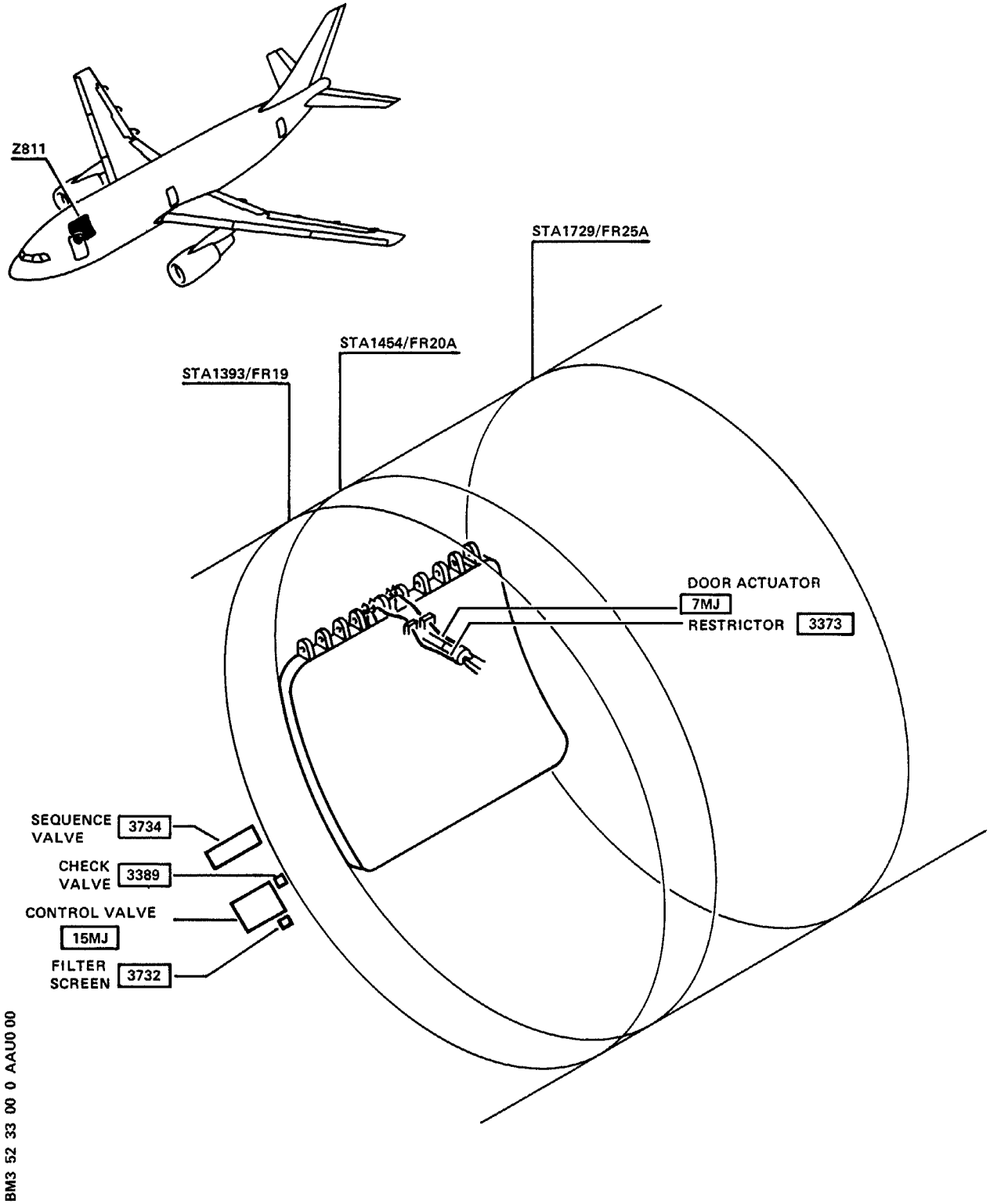
(Ref. Fig. 001)
(Ref. Fig. 002)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
3054	CHECK VALVE				
3055	CHECK VALVE				
3060	MANIFOLD		148	148XZ	29-13-37
3083	ELECTRIC PUMP CHECK VALVE		148	148XZ	29-24-13
3084	ELECTRIC PUMP DELIVERY FILTER		148	148XZ	29-24-12
3085	HAND PUMP		148	148XZ	52-33-11
3086	PRESSURE RELIEF VALVE		122	148XZ	52-33-22
3125	BRK YELLOW POWER ACCU		148	148RZ	32-44-11
3126	BRK YELLOW POWER ACCU		148	148RZ	32-44-11
3373	RESTRICTOR/CHECK VALVE		811	811	52-33-17
3375	RESTRICTOR/CHECK VALVE		812	812	52-33-17
3389	CHECK VALVE		132	811	52-33-13
3390	CHECK VALVE		152	812	52-33-14
3732	FILTER SCREEN		122	811	
3733	FILTER SCREEN		152	812	
3734	SEQUENCE VALVE		132	811	52-33-24
3735	SEQUENCE VALVE		152	812	
7MJ	DOOR ACTUATOR		132	811	52-33-18
8MJ	DOOR ACTUATOR		152	812	52-33-18
9MJ	ELECTRO-MECHANICAL SELECTOR VALVE		148	148XZ	52-33-12
10MJ	ELECTRO-MECHANICAL SELECTOR VALVE		148	148XZ	52-33-12
15MJ	CONTROL VALVE		122	811	52-33-15
16MJ	CONTROL VALVE		152	812	52-33-15
25GX	ELECTRIC PUMP		148	148XZ	29-24-11

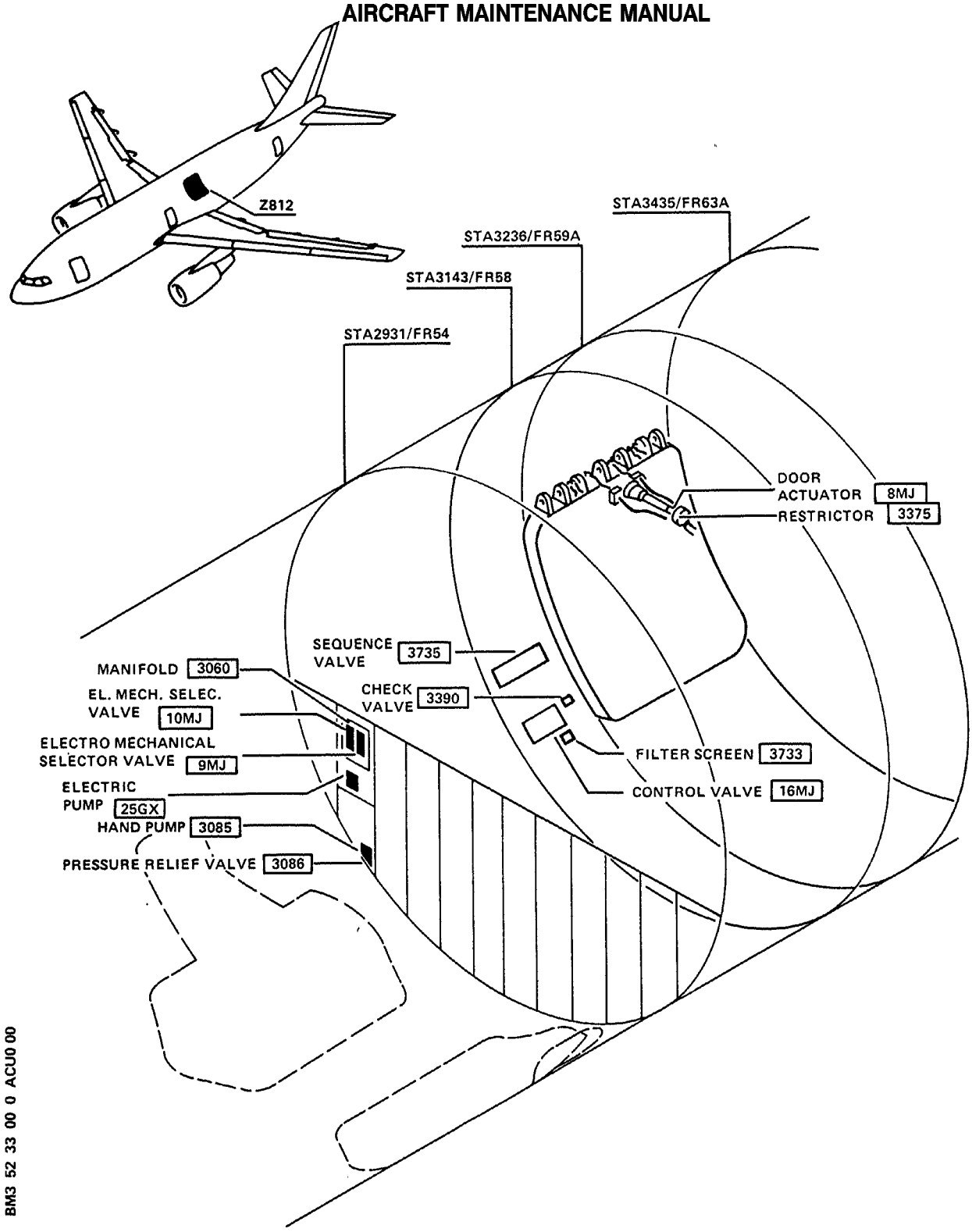
3. Description

(Ref. Fig. 003)

**ON A/C 001-003,



FWD Cargo Compartment Door Hydraulic System - Component Location
Figure 001



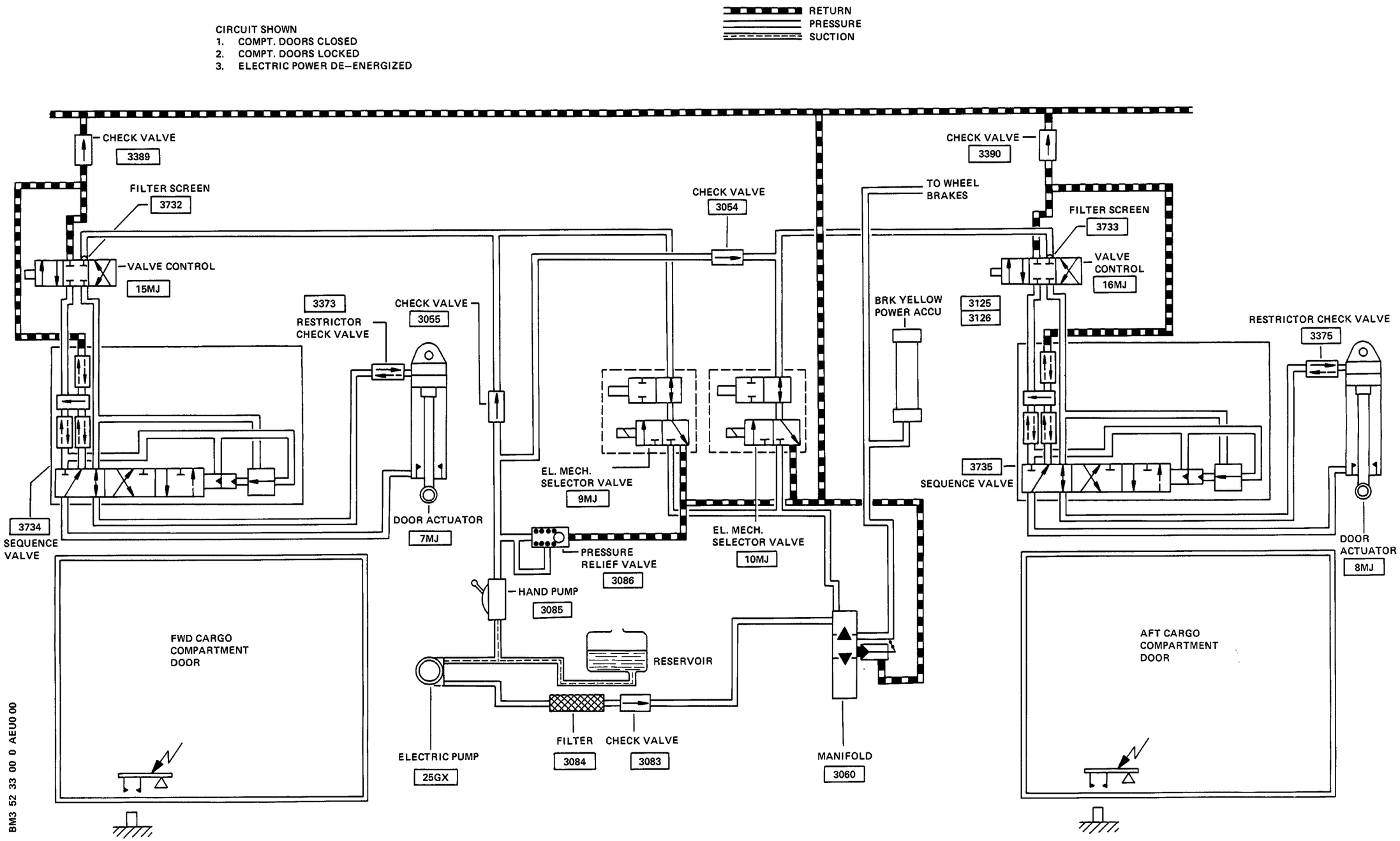
BM3 52 33 00 0 ACU0 00

AFT Cargo Compartment Door Hydraulic System - Component Location
Figure 002

INTENTIONALLY BLANK

Printed in France

CIRCUIT SHOWN
1. COMPT. DOORS CLOSED
2. COMPT. DOORS LOCKED
3. ELECTRIC POWER DE–ENERGIZED



FWD and AFT Cargo Compartment Doors -
Hydraulic System Schematic
Figure 003

EFFECTIVITY: ALL

PIA

Printed in France

(Ref. Fig. 004)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 005)

**ON A/C 001-003,

(Ref. Fig. 006)

**ON A/C ALL

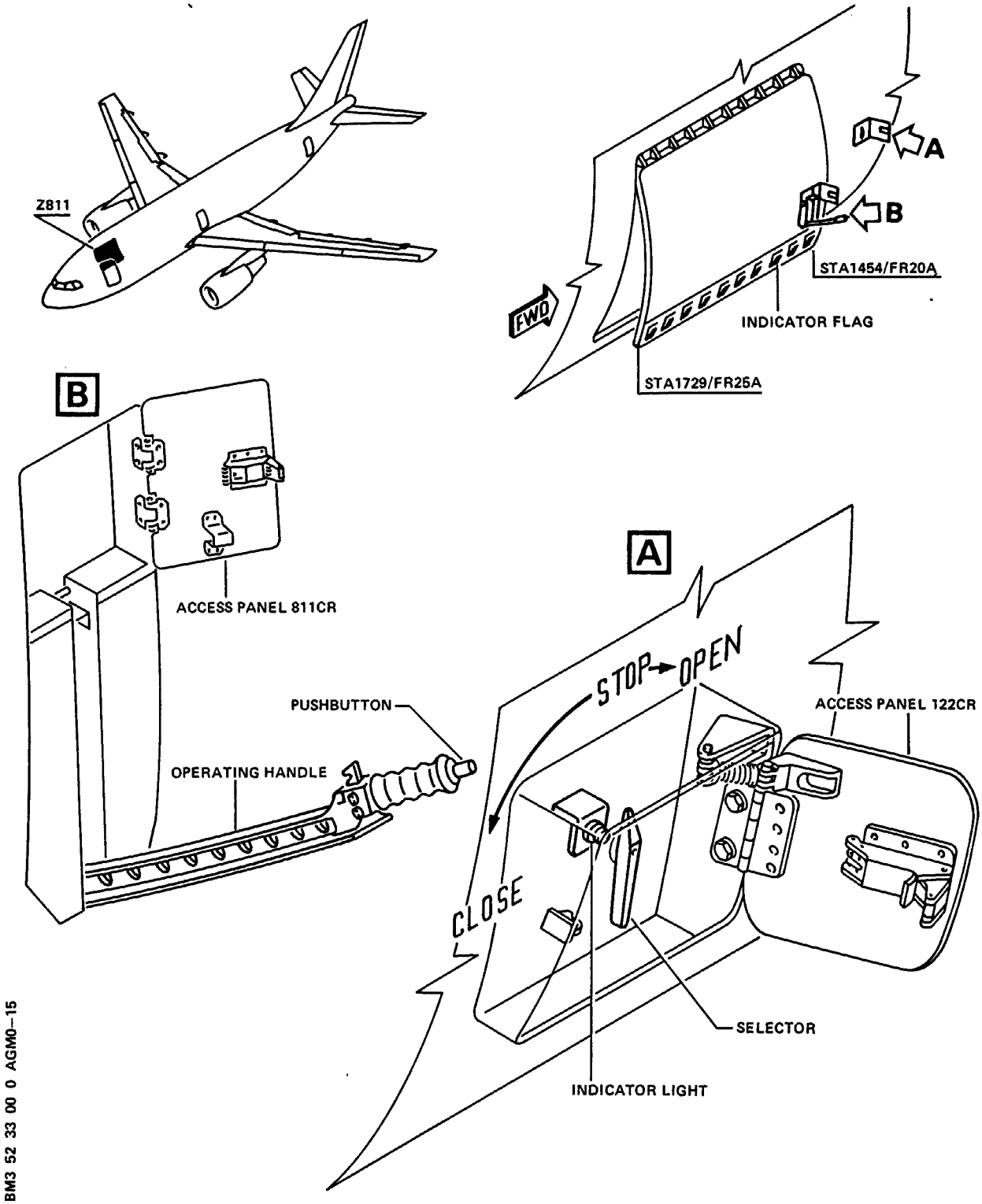
Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 007)

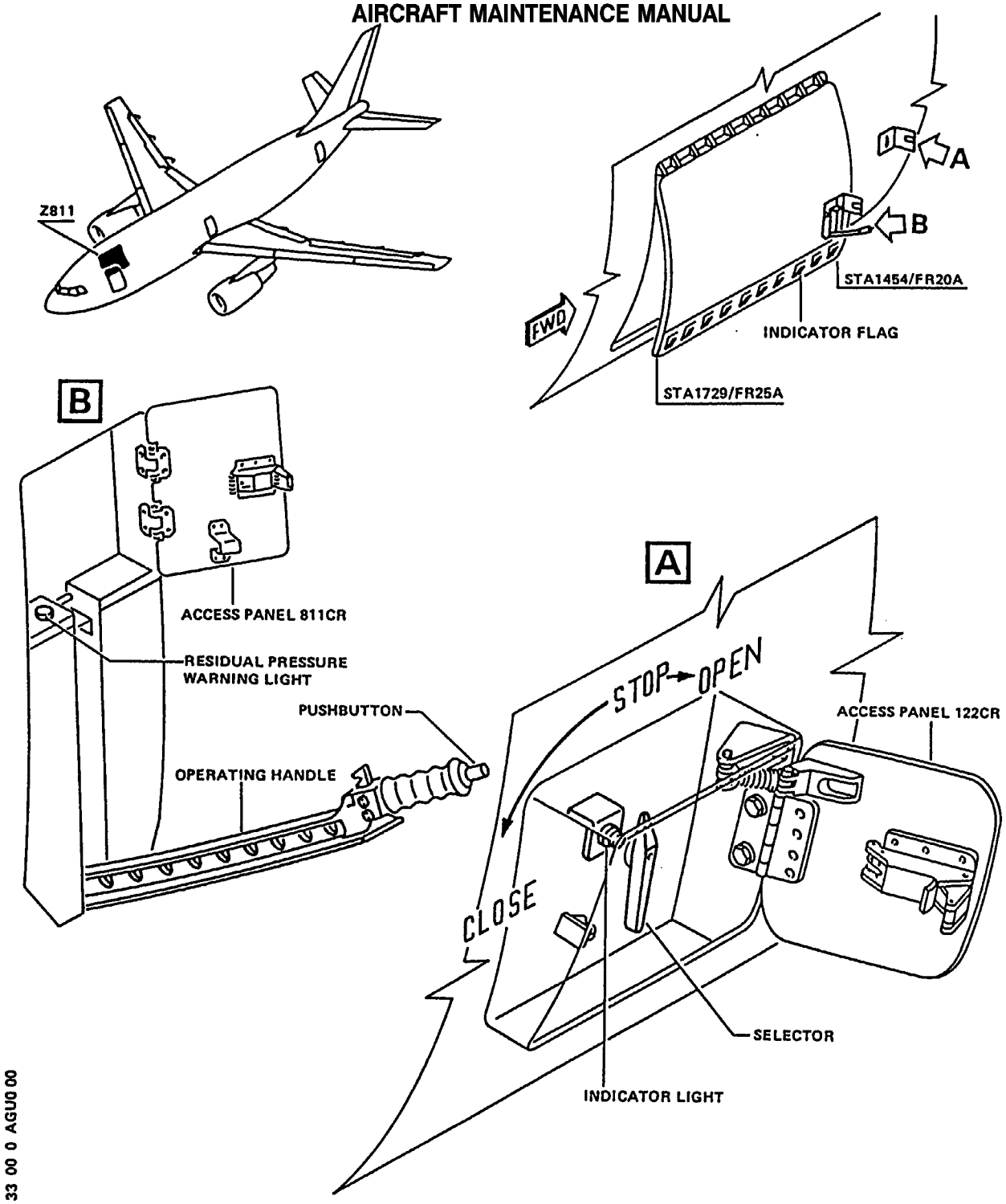
**ON A/C ALL

(Ref. Fig. 008)
(Ref. Fig. 009)
NOTE : Designations in brackets refer to the AFT cargo compartment door.

For operation of the FWD (AFT) cargo compartment door, a service panel covered by access door is installed forward of each cargo compartment door. The service panel consists of a selector, which is spring-loaded when turned, and a green indicator light, which comes on when the internal locking mechanism of the door actuator 7MJ (8MJ) is engaged.
The door actuator 7MJ (8MJ) is installed between the actuator attachmant fitting of the cargo compartment door and the actuator beam of the fuselage structure. The internal locking mechanism of the door actuator 7MJ (8MJ) retains the cargo compartment door in the open position when the piston rod of the door actuator 7MJ (8MJ) is fully extended.
Setting the selector of control valve 15MJ (16MJ) to the OPEN or CLOSE position causes a pressurization of the cargo door hydraulic system by means of electric pump 25GX (normal operation). If hydraulic power is not available from electric pump 25GX, hand pump 3085, located in the RH main landing gear well, can be used to pressurize the door hydraulic system manual (operation).
The electro-mechanical selector valves 9MJ and 10MJ, installed in the RH main landing gear well, are each equipped with a lever standing in up position during normal operation. Both levers must be set downwards when manual operation is required.
A check valve 3055 (3054) is installed in the hydraulic line to keep the system pressurized during manual operation and to separate hydraulic power from the hand pump line during normal operation.
A sequence valve 3734 (3735) is installed between control valve 15MJ (16MJ) and door actuator 7MJ (8MJ) to avoid an uncontrolled door movement caused by remaining air bubbles in the hydraulic system.

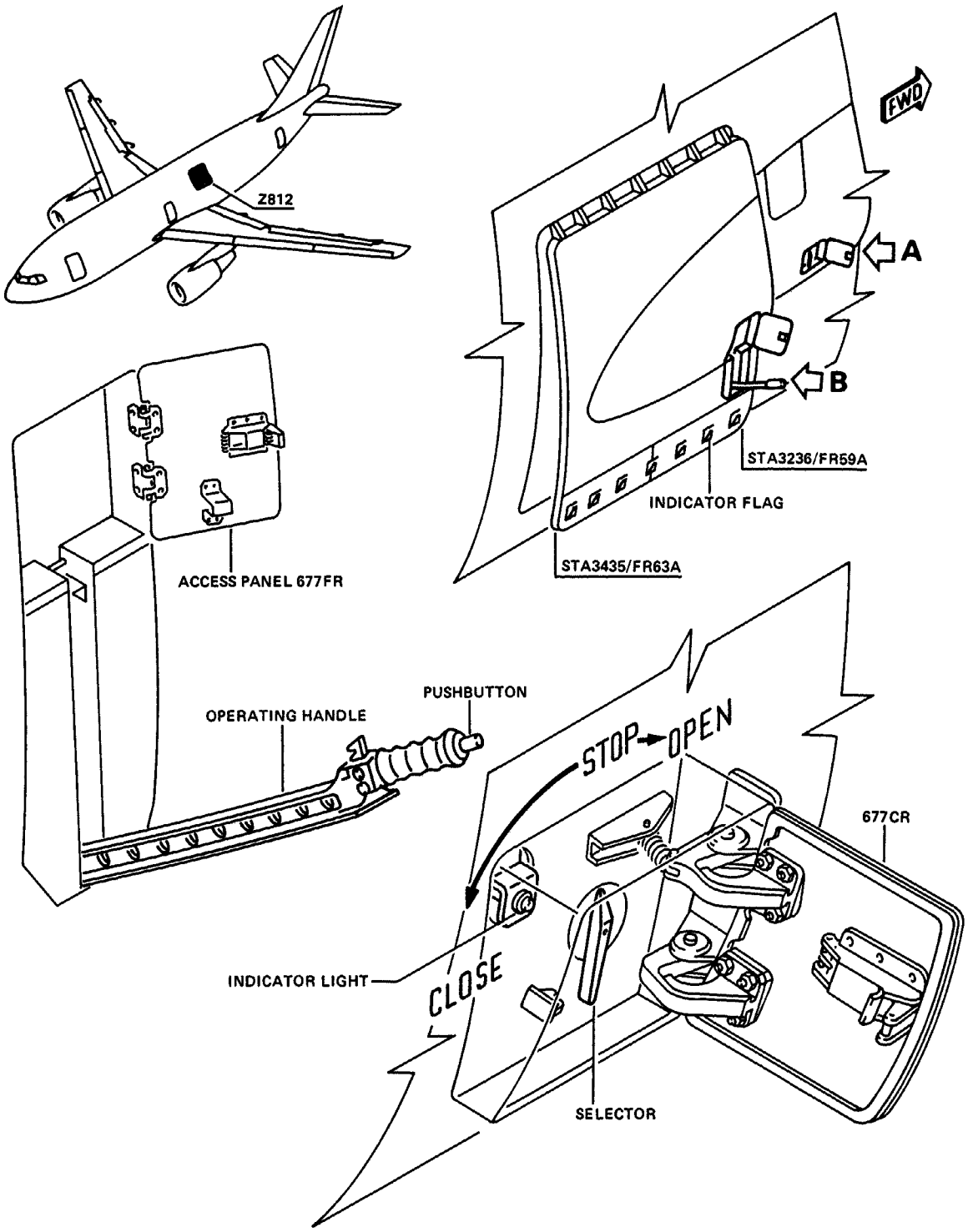


Operating Handle and Service Panel
of FWD Cargo Compartment Door
Figure 004



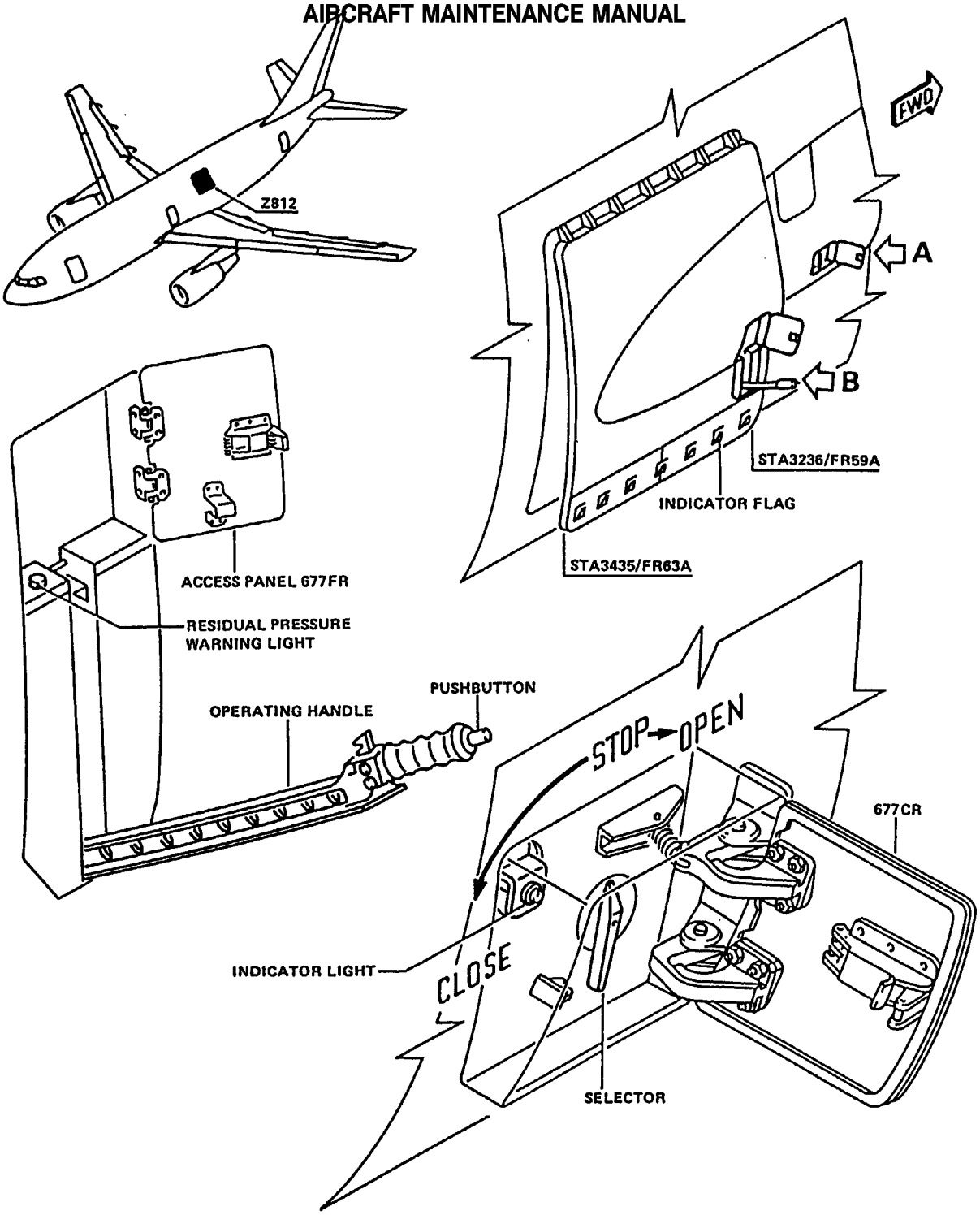
BM6 52 33 00 0 AGU0 00

Operating Handle and Service Panel
of FWD Cargo Compartment Door
Figure 005

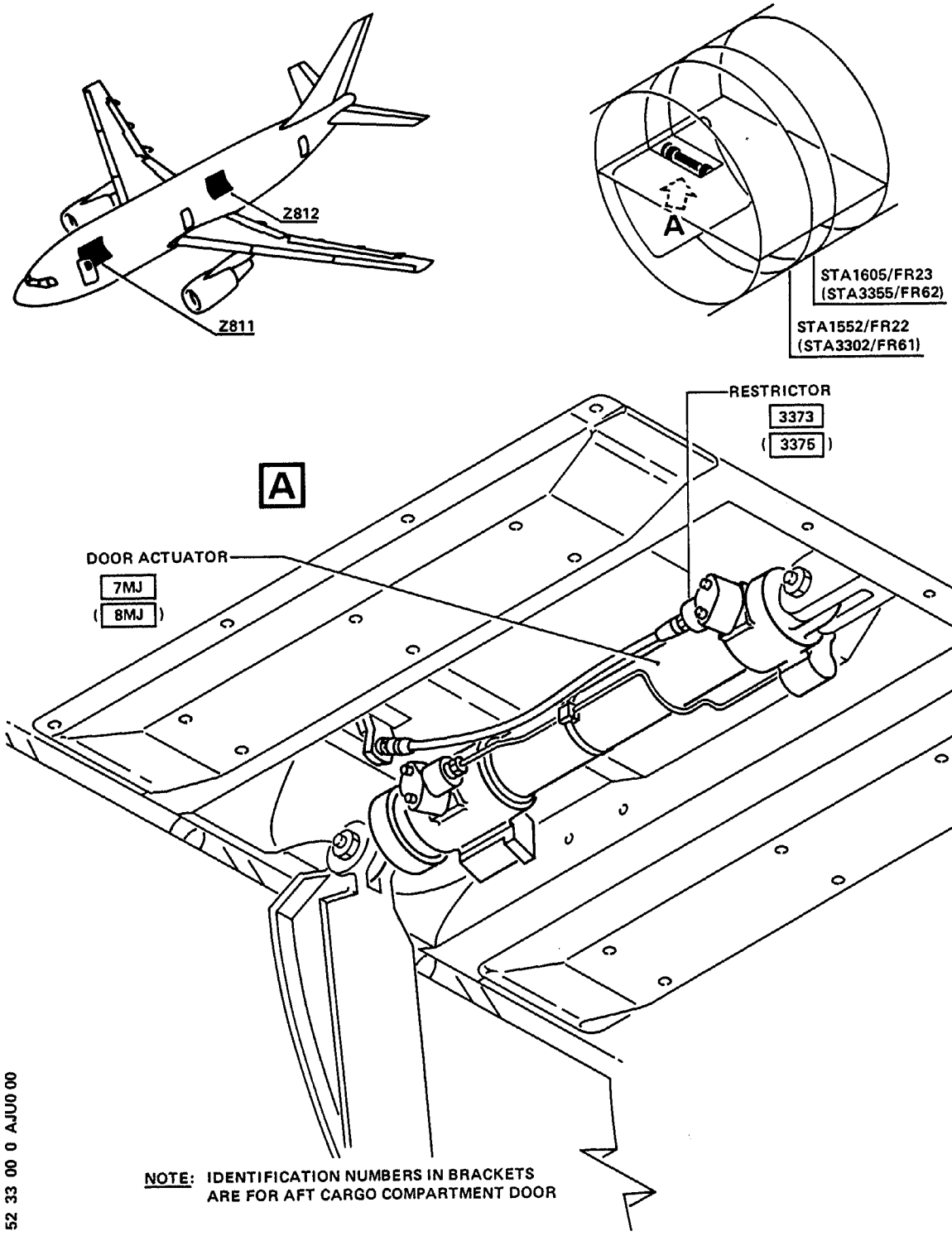


BM3 52 33 00 0 AHM0 16

Operating Handle and Service Panel
of AFT Cargo Compartment Door
Figure 006

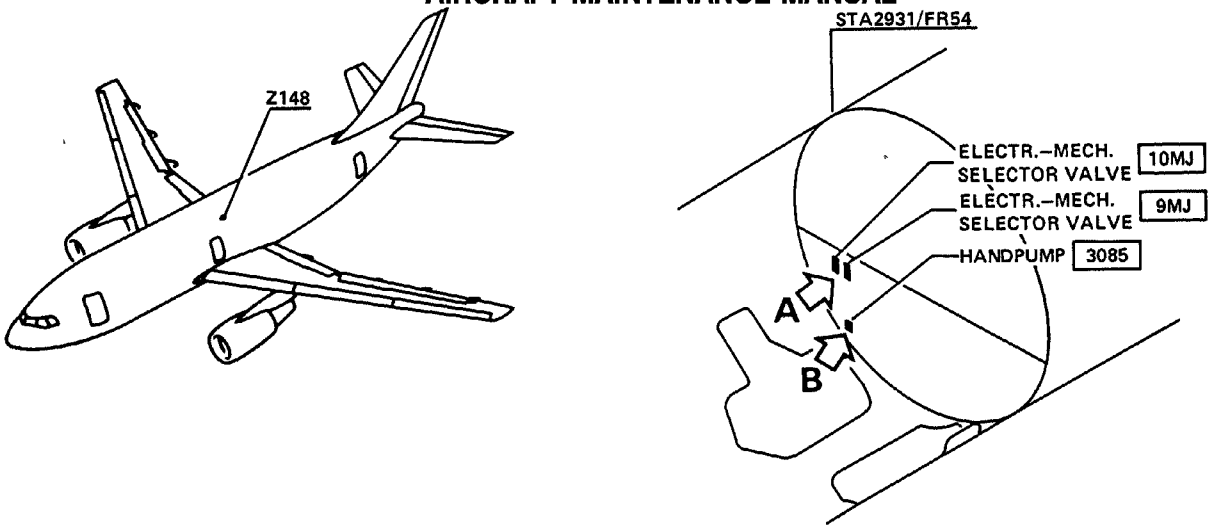


Operating Handle and Service Panel
of AFT Cargo Compartment Door
Figure 007



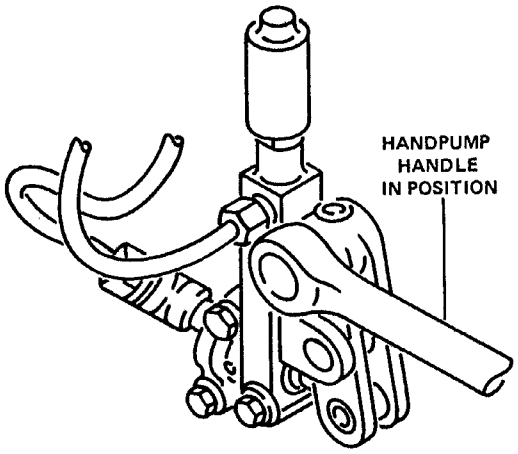
BM3 52 33 00 0 AJU0 00

Door Actuator and Restrictor
Figure 008



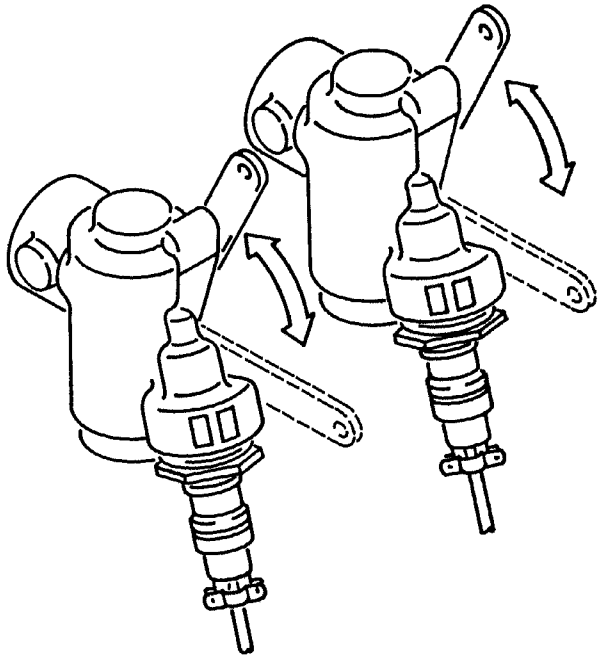
B

HANDPUMP 3085



A

ELECTRO–MECHANICAL SELECTOR VALVES 9MJ AND 10MJ



NOTE: LEVERS SHOWN IN POSITION FOR NORMAL OPERATION. PUSH DOWN FOR MANUAL OPERATION

BM3 52 33 00 0 AKM0 00

Manual Operation of FWD and AFT
Cargo Compartment Doors
Figure 009

When the selector of control valve 15MJ (16MJ) is set to CLOSE position, the sequence valve 3734 (3735) initially pressurizes the full actuator chamber and switches hydraulically and the piston rod of the door actuator starts to retract.
Pressure relief valve 3086, installed at the pressure outlet of the hand pump 3085, reduces excess pressure in the hand pump line.

4. System Operation

**ON A/C 001-003,

A. Opening by Means of Electric Pump (Normal Operation)

NOTE : Designations in brackets refer to the AFT cargo compartment door.

(1)Open access doors to get access to operating handle and to service panel.
(2)Press pushbutton to unlock operating handle in FWD (AFT) cargo compartment door, and pull operating handle out of recess and downwards.
CAUTION : PRIOR TO OPENING FWD (AFT) CAGO COMPARTMENT DOOR, MAKE CERTAIN THAT ALL INDICATOR FLAGS ARE EXTENDED.
(3)Turn selector of control valve 15MJ (16MJ) on service panel to OPEN and hold until green indicator light comes on and hold for an additional 3 seconds. Selector returns to "STOP" position when released.
When the FWD (AFT) cargo compartment door is unlocked by means of the operating handle, a torque shaft is rotated which, via the switch actuating mechanism, actuates limit switch of the door control system.
When the selector of control valve 15MJ (16MJ) is turned to OPEN, the electro-mechanical selector valve 9MJ (10MJ) is energized and the electric pump 25GX is switched on.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

A. Opening of the FWD and AFT Cargo Compartment Doors by means of Electric Pump (Normal Operation)

NOTE : Designations in brackets refer to the AFT cargo compartment door.

(1)Open access doors to get access to operating handle and to service panel.
WARNING : DO NOT OPERATE THE OPERATING HANDLE WHEN THE RED WARNING LIGHT OF THE RESIDUAL PRESSURE SYSTEM FLASHES.
(2)Press pushbutton to unlock operating handle in FWD (AFT) cargo compartment door, and pull operating handle out of recess and downwards.
CAUTION : PRIOR TO OPENING FWD (AFT) CAGO COMPARTMENT DOOR, MAKE CERTAIN THAT ALL INDICATOR FLAGS ARE EXTENDED.
(3)Turn selector of control valve 15MJ (16MJ) on service panel to OPEN

and hold until green indicator light comes on and hold for additional 3 seconds. Selector returns to "STOP" position when released.
When the FWD (AFT) cargo compartment door is unlocked by means of the operating handle, a torque shaft is rotated which, via the switch actuating mechanism, actuates limit switch of the door control system.
When the selector of control valve 15MJ (16MJ) is turned to OPEN, the electro-mechanical selector valve 9MJ (10MJ) is energized and the electric pump 25GX is switched on.
Hydraulic fluid flows from the electric pump 25GX via pressure manifold 3060, electro-mechanical selector valve 9MJ (10MJ), control valve 15MJ (16MJ) and sequence valve 3734 (3735) to door actuator 7MJ (8MJ) and opens the FWD (AFT) cargo compartment door.
When the cargo compartment door is fully opened and the door actuator is internally mechanically locked, the green indicator light on the service panel comes on.
As soon as the selector of control valve 15MJ (16MJ) on the service panel is released, the electric pump 25GX is switched off; simultaneously the electro-mechanical selector valve 9MJ (10MJ) is de-energized, cutting off the hydraulic flow to the door actuator 7MJ (8MJ).

**ON A/C ALL

When the cargo compartment door is fully opened and the door actuator is internally mechanically locked, the green indicator light on the service panel comes on.
As soon as the selector of control valve 15MJ (16MJ) on the service panel is released, the electric pump 25GX is switched off; simultaneously the electro-mechanical selector valve 9MJ (10MJ) is de-energized, cutting off the hydraulic flow to the door actuator 7MJ (8MJ).

B. Closing of FWD and AFT Cargo Compartment Doors by Means of Electric Pump (Normal Operation)

(1) Make certain that the operating handle is pulled down and the manually operated YZ-latches of the door sill latches are raised.

(2) Turn selector of control valve 15MJ (16MJ) on the service panel to CLOSE position and hold until cargo compartment door is fully closed.
Operation of the selector causes hydraulic fluid to flow from electric pump 25GX via pressure manifold 3060, electro-mechanical selector valve 9MJ (10MJ), sequence valve 3734 (3735), control valve 15MJ (16MJ) and to door actuator 7MJ (8MJ) and closes the FWD (AFT) cargo compartment door.
The green indicator light on the service panel goes off when the internal locking mechanism of door actuator 7MJ (8MJ) is deactivated and the FWD (AFT) cargo compartment door is closing.
The closing rate of the cargo compartment door is limited by restrictor 3378 (3375) controlling the return flow of hydraulic fluid.

(3) Release selector of control valve 15MJ (16MJ).
The selector returns to the STOP position, cutting off the hydraulic flow to door actuator 7MJ (8MJ) by switching off electric pump 25GX and de-energizing electro-mechanical selector valve 9MJ (10MJ).

(4)To lock the FWD (AFT) cargo compartment door and de-energize the limit switch of the door control system, push the operating handle upwards into the recess until it locks.
CAUTION : ALL INDICATOR FLAGS OF CAGO COMPARTMENT DOOR MUST BE RETRACTED.
(5)Close access doors of operating handle and service panel.

**ON A/C 001-003,

C. Opening by Means of Hand Pump (Manual Operation)
NOTE : Two operators are required for this procedure.
(1)Open access doors to get access to operating handle and service panel.
(2)Press pushbutton to unlock operating handle of FWD (AFT) cargo compartment door and pull operating handle out of recess and downward.
CAUTION : PRIOR TO OPENING FWD (AFT CATO COMPARTMENT DOOR, MAKE CERTAIN THAT ALL INDICATOR FLAGS ARE EXTENDED.
(3)Push levers of both electro-mechanical selector valves 9MJ and 10MJ in the RH main landing gear well down to manual position.
(4)Turn selector of control valve 15MJ (16MJ) on the service panel to OPEN position and hold.
(5)Operate hand pump 3085 located in the RH main landing gear well until FWD (AFT) cargo compartment door is fully open. A considerable increase in force is felt on hand pump lever if door actuator is in its extended, internally locked position. Hydraulic fluid flows via check valve 3055 (3054) in the pressure line of door hydraulic system to extend piston of door actuator 7MJ (8MJ).
(6)Set levers of both electro-mechanical selector valves 9MJ and 10MJ in the RH main landing gear well up to normal position.

D. Closing by Means of Hand Pump (Manual Operation)
NOTE : Two operators are required for this procedure.
(1)Make certain that the operating handle is pulled down and the manually operated YZ-latches of the door sill latches are raised.
(2)Push levers of both electro-mechanical selector valves 9MJ and 10MJ in the RH main landing gear well down to manual position.
(3)Turn selector of control valve 15MJ (16MJ) on the service panel to CLOSE position and hold.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

C. Opening by Means of Hand Pump (Manual Operation)
NOTE : Two operators are required for this procedure.
(1)Open access doors to get access to operating handle and service panel.
WARNING : DO NOT OPERATE THE OPERATING HANDLE WHEN THE RED WARNING LIGHT OF THE RESIDUAL PRESSURE SYSTEM FLASHES.
(2)Press pushbutton to unlock operating handle of FWD (AFT) cargo compartment door and pull operating handle out of recess and downward.
CAUTION : PRIOR TO OPENING FWD (AFT CATO COMPARTMENT DOOR, MAKE CERTAIN

THAT ALL INDICATOR FLAGS ARE EXTENDED.

(3)Push levers of both electro-mechanical selector valves 9MJ and 10MJ in the RH main landing gear well down to manual position.

(4)Turn selector of control valve 15MJ (16MJ) on the service panel to OPEN position and hold.

(5)Operate hand pump 3085 located in the RH main landing gear well until FWD (AFT) cargo compartment door is fully open. A considerable increase in force is felt on hand pump lever if door actuator is in its extended, internally locked position. Hydraulic fluid flows via check valve 3055 (3054) in the pressure line of door hydraulic system to extend piston of door actuator 7MJ (8MJ).

(6)Set levers of both electro-mechanical selector valves 9MJ and 10MJ in the RH main landing gear well up to normal position.

D. Closing by Means of Hand Pump (Manual Operation)

NOTE : Two operators are required for this procedure.

(1)Make certain that the operating handle is pulled down and the manually operated YZ-latches of the door sill latches are raised.

(2)Push levers of both electro-mechanical selector valves 9MJ and 10MJ in the RH main landing gear well down to manual position.

(3)Turn selector of control valve 15MJ (16MJ) on the service panel to CLOSE position and hold.

**ON A/C ALL

NOTE : When closing the FWD (AFT) cargo compartment door from an intermediate position, the cargo door will first move in the open direction until sufficient pressure is built up in the sequence valve to reach the changeover position; the cargo door will then close.

(4)Operate hand pump 3085 until FWD (AFT) cargo compartment door is closed. Hydraulic fluid flows from hand pump 3085 via check valve 3055 (3054) in the pressure line to retract door actuator 7MJ (8MJ).
The internal locking mechanism of door actuator 7MJ (8MJ) is deactivated and FWD (AFT) cargo compartment door closes.

(5)When the FWD (AFT) cargo compartment door is closed, push operating handle upwards into the recess until it locks.

CAUTION : ALL INDICATOR FLAGS OF CAGO COMPARTMENT DOOR MUST BE RETRACTED.

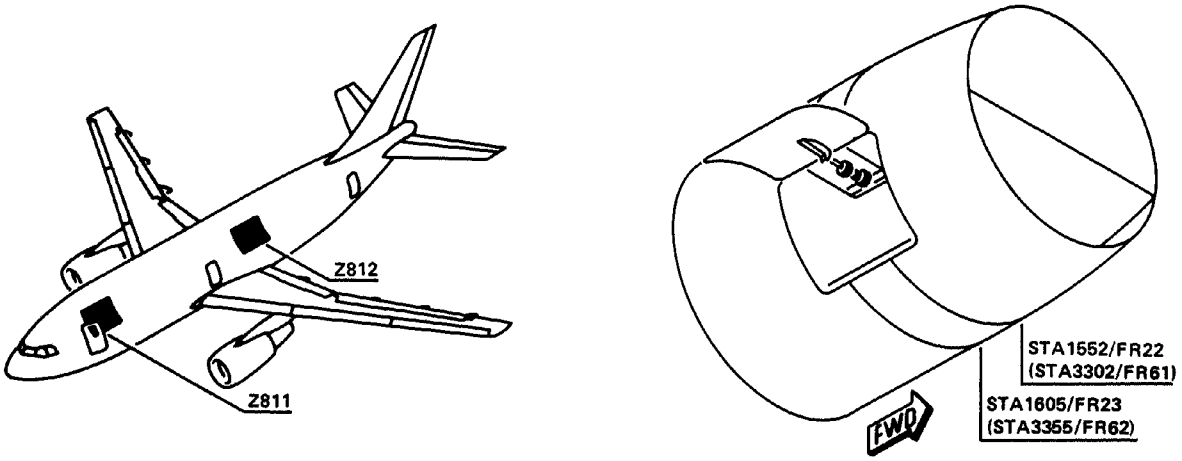
(6)Set levers of both electro-mechanical selector valves 9MJ and 10MJ in the RH main landing gear well up to normal position.

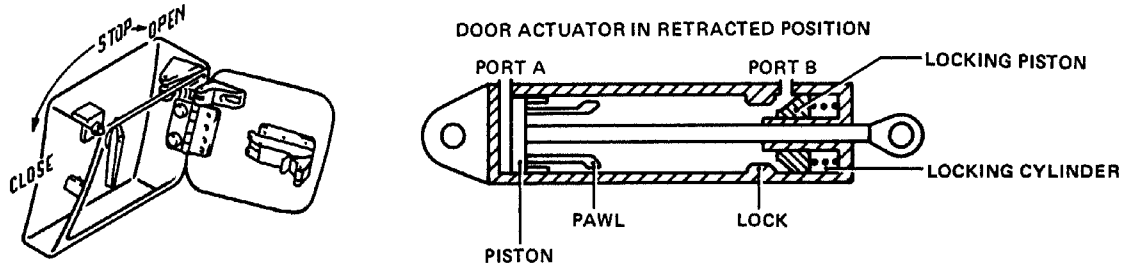
(7)Close access doors of operating handle and service panel.

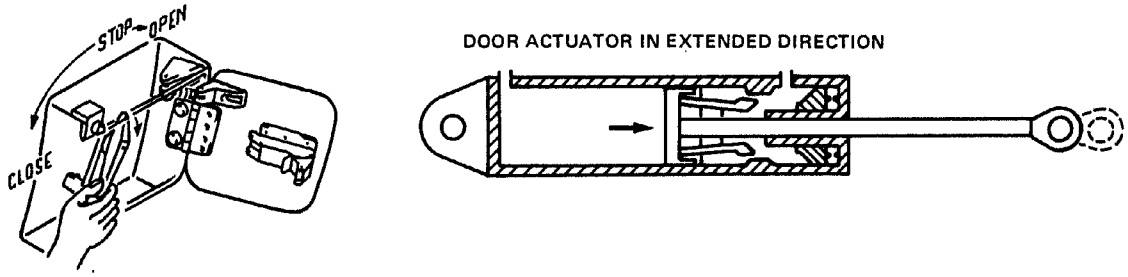
5. Door Actuator Operation

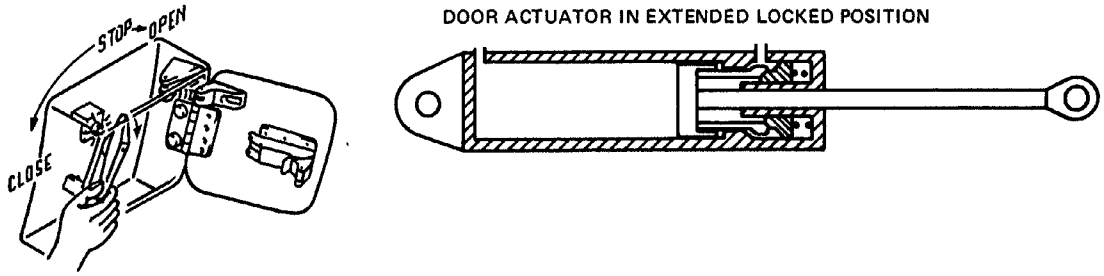
(Ref. Fig. 010)

A. Extension
When hydraulic pressure is applied to the actuator at port A, the piston is forced along the internal bore of the actuator body exhausting the return hydraulic fluid through port B. Towards the end of the piston travel, the pawls pass over a lock and then force the locking piston against its spring in the locking cylinder. By returning the control









BM3 52 33 00 0 AVM0 00

Door Actuator Operation
Figure 010

handle which is spring-loaded to the STOP position, hydraulic pressure at port A is shut off and the fully extended ram retracts slightly until the pawls are held against the lock by spring pressure on the locking piston. The actuator is thus mechanically locked in its extended position.

B. Retraction
When hydraulic pressure is applied to the actuator at port B, the locking piston is forced against its spring in the locking cylinder, allowing the pawls to pass over the lock, and the piston is forced along the internal base of the actuator body, exhausting the return hydraulic fluid through port A until the piston reaches the end of its travel and the actuator is in its fully retracted position.

CARGO COMPARTMENT DOOR HYDRAULIC SYSTEM SERVICING

1. Reason for the Job

After removal and installation of any associated hydraulic component, it is necessary to bleed the hydraulic system of the FWD or AFT cargo compartment door (door hydraulic system).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B.	Circuit Breaker Safety Clips and Tags
C. 98A52307529001	Sling - Cargo Doors
D.	Crane with a min. capacity of 200 kg. (441 lb.)
E. 98A52307523000	Support Struts

Referenced Procedures

- 12-12-29, P. Block 1	Hydraulics
- 24-41-00, P. Block 301	AC External Power Control
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors

3. Procedure

A. Job Set-Up

(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make sure that electronics racks ventilation is correct.
(4)Make sure that the opened FWD or AFT cargo compartment door is safetied with the support struts PN98A5230752300 (Ref. 52-30-00, P. Block 1).
(5)Open main gear main doors (Ref. 32-12-11, P. Block 301).
(6)Depressurize Yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(7)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B5

B. Bleeding Procedure

R (1)Bleeding Procedure without Crane.
R NOTE : Due to safety reasons the Door Actuator must be disconnected.

(Ref. Fig. 301)
(Ref. Fig. 302)
NOTE : Designations in brackets refer to the AFT cargo compartment door.

(a) Disconnect the eye-end of the door actuator from the actuator attachment fitting of the cargo door by removing the attachment bolt (Ref. 52-33-18, P. Block 401) and support door actuator to avoid deformation of pipelines.

(b) Bleed the door hydraulic system with the electric pump 25GX as follows:

1 Remove safety clips and tags and close the circuit breakers: 7GX and 23GX.

2 Pressurize the Yellow hydraulic system (Ref. 29-10-00, P. Block 301).

3 Make sure that the door actuator is kept in a horizontal position so that its hydraulic connections are not stressed during the bleeding procedure.

4 Move the selector of the control valve 15MJ (16MJ) to the CLOSE position until the door actuator is fully retracted.

5 Make sure that the travel range of the door actuator is free during the bleeding procedure.

6 Turn the selector of the control valve 15MJ (16MJ) to the OPEN position until the door actuator is fully extended.

7 Retract and extend the door actuator ten times.

8 Open, safety and tag the circuit breakers 7GX and 23GX.

(c) Bleed the door hydraulic system with the hand pump 3085 as follows:

1 Push the levers of both electro-mechanical selector valves 9MJ and 10MJ located in RH main wheel well down to their manual position.

2 Turn the selector of the control valve 15MJ (16MJ) to "CLOSE" position and operate the handpump until the piston rod of the door actuator is fully retracted.

3 Turn the selector of the control valve 15MJ (16MJ) to "OPEN" position and operate the handpump until the piston rod of door actuator is fully extended.

4 Retract and extend the door actuator ten times.

5 Pull up the levers of both electro-mechanical selector valves 9MJ and 10MJ located in the RH main wheel well up to normal position.

(d) Position eye-end of door actuator on actuator attachment fitting and install attachment bolt (Ref. 52-33-18, P. Block 401).

(e) Make sure that the support struts are not under load and then remove struts from the cargo compartment door (Ref. 52-30-00, P. Block 301).

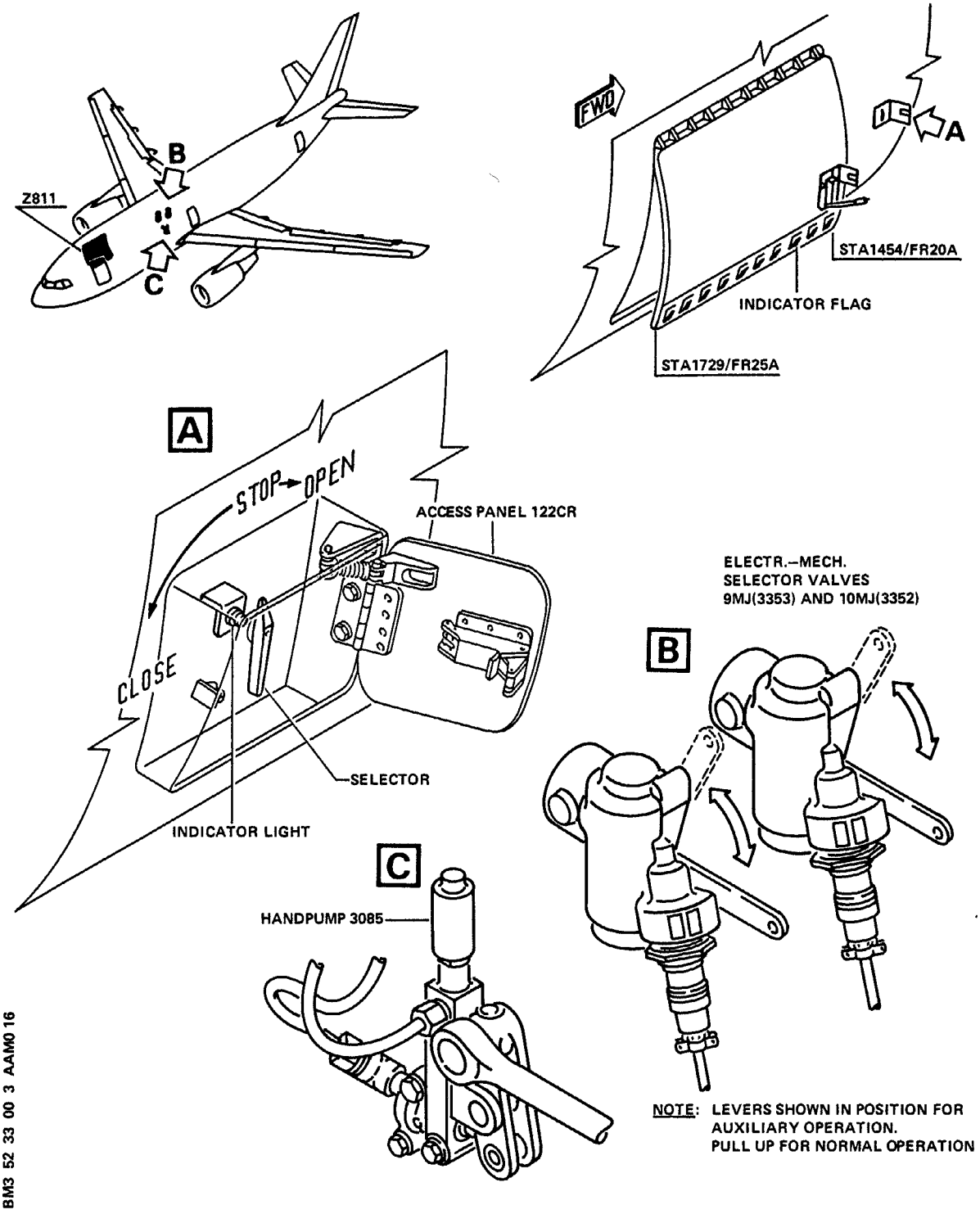
(7) Check the function of sequence valve as follows:

(a) Close cargo compartment door until the door is hanging in the perpendicular position.

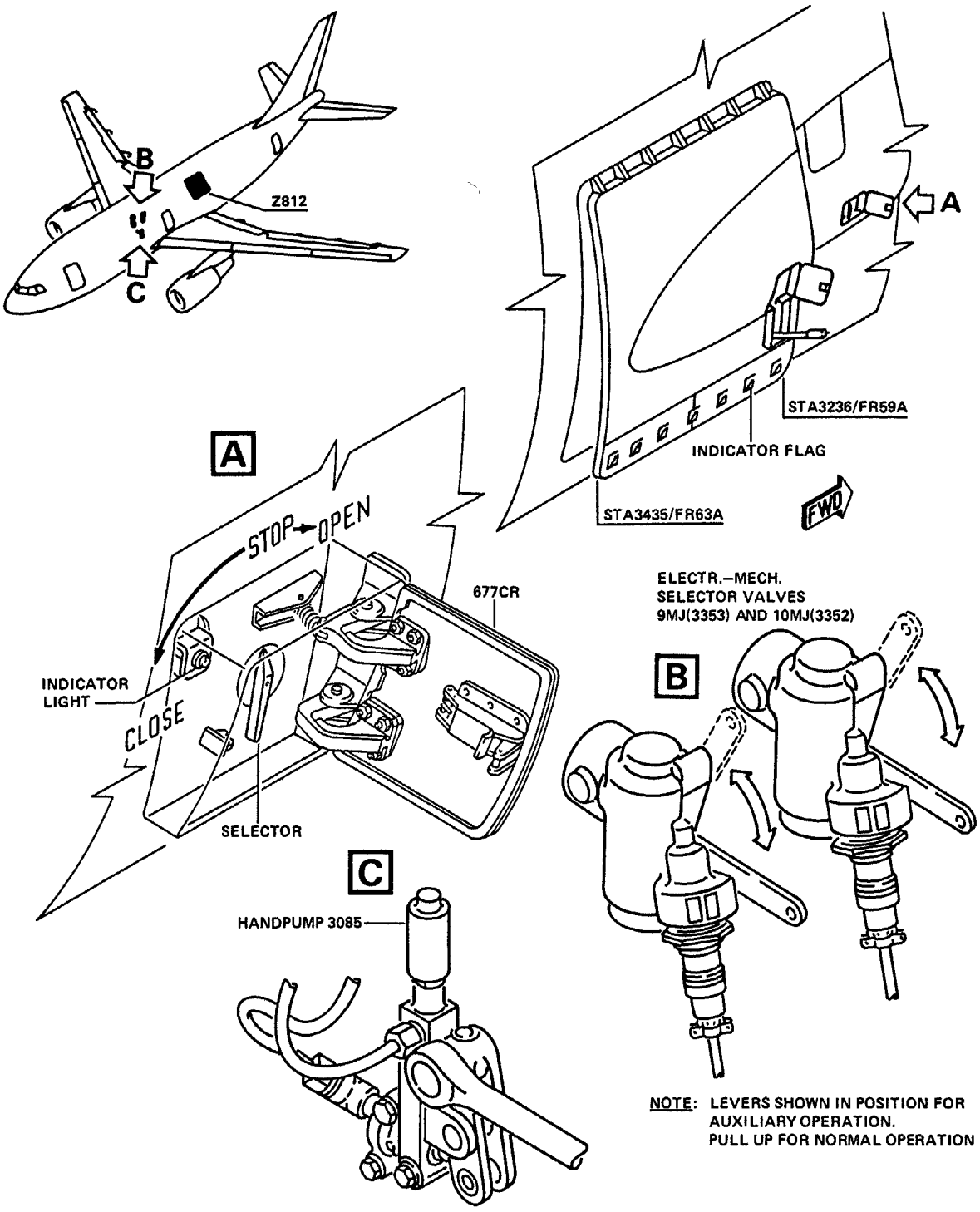
(b) Turn selector of control valve 15MJ (16MJ) to "CLOSE" position.

(c) Make sure that the cargo compartment door initially moves in the opening direction until sequence valve is switched hydraulically changing cargo door movement into its closing direction.

NOTE : If the applicable cargo compartment door moves directly into close direction, this indicates a defective



FWD Cargo Compartment Door -
Hydraulic Bleed Controls
Figure 301



BM3 52 33 00 3 ACM0 16

AFT Cargo Compartment Door -
Hydraulic Bleed Controls
Figure 302

sequence valve.

(2)Bleeding Procedure with Crane

(a)Safety the FWD or AFT cargo compartment door with the sling PN98A52307529001 and the crane (Ref. 52-30-00, P. Block 1).

(b)Bleed the door hydraulic system with the electric pump 25GX as follows:

1 Remove safety clips and tags and close the circuit breakers 7GX and 23GX.

2 Move the selector of the control valve 15MJ (16MJ) to the CLOSE position and operate the crane until the applicable cargo compartment door is closed.

3 Move the selector of the control valve 15MJ (16MJ) to the OPEN position until the applicable cargo compartment door is fully closed.

4 Open and close the applicable cargo compartment door ten times.

5 Open, safety and tag the circuit breakers 7GX and 23GX.

(c)Bleed the door hydraulic system with the hand pump as follows:

1 Push the levers of both electro-mechanical selector valves 9MJ and 10MJ located in RH main wheel well down to manual position.

2 Turn the selector of the control valve 15MJ (16MJ) to "CLOSE" position.

3 Operate handpump and the crane until cargo compartment door is fully closed.

4 Make sure that the sling prevents a sudden drop of the applicable cargo compartment door.

5 Turn selector of control valve 15MJ (16MJ) to "OPEN" position and operate handpump until cargo compartment door is fully opened.

6 Move the door operation lever to the CLOSE position until the door actuator is fully retracted (Ref. 52-30-00, P. Block 201).

(d)Remove the sling PN98A52307529002 from the cargo door (Ref. 52-30-00, P. Block 201).

C. Test

(1)Remove safety clips and tags and close circuit breakers 7GX and 23GX.

(2)Pressurize Yellow auxiliary power hydraulic system (Ref. 29-24-00, P. Block 301).

(3)Open and close cargo compartment door (Ref. 52-30-00, P. Block 1) and verify correct operation.

(4)Replenish Yellow hydraulic system reservoir (Ref. 12-12-29, P. Block 1).

D. Close-Up

(1)Pressurize Yellow hydraulic system (Ref. 29-10-00, P. Block 301).

(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(3)Make certain that FWD and/or AFT cargo compartment door(s) are correctly closed.

(4)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

(5)Remove access platform.

CARGO COMPARTMENT DOOR HYDRAULIC SYSTEM - INSPECTION/CHECK

1. Reason for the Job

To visually inspect the security and condition of pipe, fittings and associated components of the FWD and AFT cargo compartment door hydraulic system (referred to as door hydraulic system).

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Inspection Mirror
D.	Magnifying Glass - X10

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-54-10, P. Block 201	FWD Cargo Compartment Linings
- 25-55-10, P. Block 201	AFT Cargo Compartment Linings
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-33-18, P. Block 401	Door Actuator
- 52-33-24, P. Block 401	Manifold Assy (Sequence Valve)

3. Procedure

A. Job Set-Up

(1)Position access platform.

(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(3)Make certain that electronics racks ventilation is correct.

(4)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).

(5)Install door actuator safety lock to FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).

(6)Remove ceiling panels and linings to get access to hydraulic components and their attchment fittings (Ref. 25-54-10, P. Block 201, and 25-55-10, P. Block 201).

(7)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B7

B. Inspection/Check

NOTE : Inspection for hydraulic fluid leakage can best be accom-plished when the hydraulic components are in the uncleaned condition.

(1)Carry out inspection and check of the following areas and components:

(a)Door actuator area for leakage of hydraulic fluid.

(b)Door actuator attachment bolts and screws for security.

(c)Actuator attachment fitting on cargo door and actuator beam in cross-beam area for scratches, marks, dents (Ref. 51-73-10, P. Block 801) and corrosion (Ref. 51-74-10, P. Block 801).

(d)Actuator piston rod for longitudinal and/or transverse grooves.

NOTE : Should piston rod cracks be suspected or grooves detected, remove and replace with new door actuator (Ref. 52-33-18, P. Block 401).

(e)Flexible hydraulic hoses of door actuator for damage or leaks.

(f)Bulkhead fittings and hydraulic connections for security and leakage.

(g)Restrictor valve on door actuator for security and leakage.

(h)Hydraulic pipes in fuselage section for security, damage (chafing) and leakage.

(i)Brackets and clamps of hydraulic components in fuselage section for damage and corrosion (Ref. 51-74-10, P. Block 801).

(j)Connections of all hydraulic valves of door hydraulic system for leaks.

C. Test

(1)Remove safety clips and tags and close circuit breakers 7GX and 23GX.

(2)Remove safety lock from door actuator (Ref. 52-30-00, P. Block 301).

(3)Close and open FWD or AFT cargo compartment door by means of electric hydraulic pump (Ref. 52-30-00, P. Block 1).

(4)Make certain that green indicator light on service panel comes on to indicate that the door actuator is in its fully extended and internally locked position.

(5)Close and open FWD or AFT cargo compartment door by means of hand pump (Ref. 52-30-00, P. Block 1). A considerable increase in force is felt on hand pump lever if door actuator is in its fully extened and internally locked position.

(6)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).

(7)Carry out an operational test of sequence valve 3734 (3735) as follows:

NOTE : Designations in brackets refer to AFT cargo compartment door.

(a)Open access panel to get access to applicable operating handle.

(b)Press pushbutton into operating handle and pull operating handle downward from recess.

(c)Set both levers of electro-mechanical selector valves 9MJ and 10MJ located in RH main wheel well downwards to manual position.

(d)Turn selector of control valve 15MJ (16MJ) to OPEN position and hold.

(e)Operate hand pump until cargo compartment door is hanging in the perpendicular position.

(f)Turn selector of control valve 15MJ (16MJ) to CLOSE position and operate hand pump.

(g)Make certain that cargo compartment door initially moves further upwards until the sequence valve is switched hydraulically, changing cargo compartment door movement to the close direction.

NOTE : If cargo compartment door moves directly in close direction,

this indicates a defective sequence valve (for removal/ installation refer to 52-33-24, P. Block 401).

(h)Raise both levers of electro-mechanical selector valves 9MJ and 10MJ located in RH main wheel well up to normal position.

(i)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).

D. Close-Up

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(2)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

(3)Replace removed ceiling panels and linings in door actuator area (Ref. 25-54-10, P. Block 201 and 25-55-10, P. Block 201).

(4)Remove access platform.

HAND PUMP (3085) - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE
R ON OR NEAR GARGO DOORS (REF. 52-30-00, P. BLOCK 301).

1. Equipment and Materials

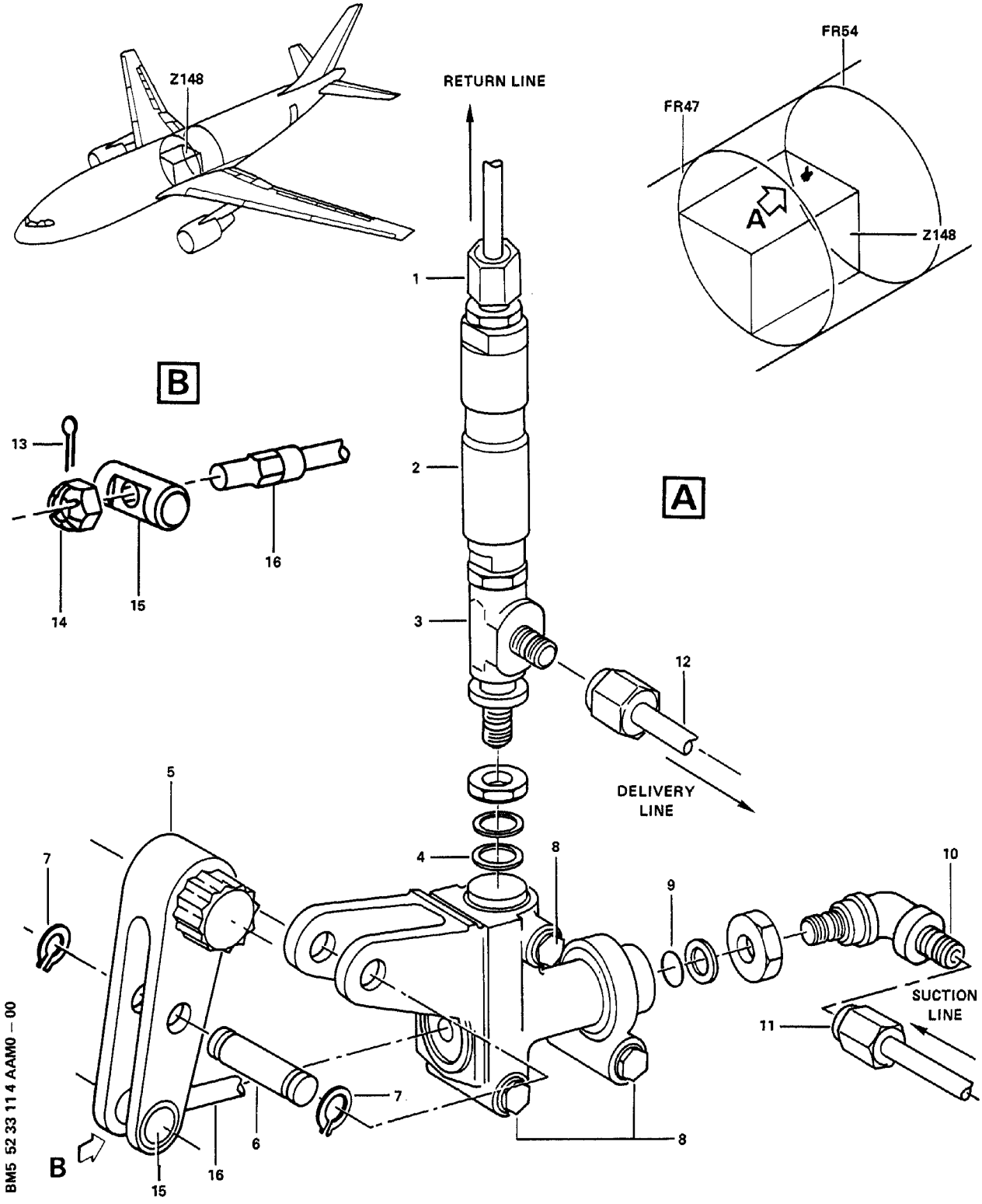
ITEM	DESIGNATION
A. 98A52307523000	Support Struts - FWD and AFT Cargo Compartment Doors
B.	Container
C.	Warning Notices
Referenced Procedures	
- 12-12-29, P. Block 1	Hydraulics
- 29-00-00, P. Block 301	Hydraulic Power
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)
- 52-33-00, P. Block 1	Cargo Compartment Door Hydraulic System

2. Procedure

A. Job Set-Up
(1)Open cargo compartment doors (Ref. 52-33-00, P. Block 1) and install cargo compartment door support struts.
(2)Display a warning notice on cargo compartment door control valve selector prohibiting door closing.
(3)Open landing gear doors (Ref. 32-12-11, P. Block 301).
(4)Depressurize Yellow reservoir (Ref. 29-14-00, P. Block 301).
(5)Depressurize Yellow system (Ref. 29-10-00, P. Block 301).
(6)Drain Yellow hydraulic reservoir (Ref. 29-00-00, P. Block 301).

B. Removal (Ref. Fig. 401)
(1)Install a container under hand pump.
(2)Disconnect delivery line (12).
(3)Disconnect suction line (11).
(4)Disconnect reservoir return line (1) from pressure relief valve (2).
(5)Remove hand pump attaching screws (8).
(6)Remove hand pump.

C. Preparation of Replacement Component
(1)Remove union (10) from removed hand pump, replace seal (9) and install



Hand Pump 3085
Figure 401

union on replacement hand pump.
(2)Remove pressure relief valve (2) together with tee-union (3) from removed hand pump ; replace seal (4) and install pressure relief valve and tee-union on replacement hand pump.
(3)Remove circlip (7) pin (6).
(4)Remove cotter pin (13), nut (14) ; then remove holding pivot (15).
(5)Remove lever assembly from removed hand pump and install on replacement hand pump.

D. Installation
(1)Install hand pump; install securing screws (8) ; do not tighten at this stage.
(2)Connect hydraulic lines (11), (12), (1) and tighten unions.
(3)Tighten hand pump securing screws (8).

E. Test
(1)Replenish Yellow hydraulic reservoir (Ref. 12-12-29, P. Block 1)
(2)Pressurize Yellow hydraulic reservoir
(3)Bleed hydraulic system using door actuator (Ref. 52-33-00, P. Block 301).
(4)Remove support struts.
(5)Check for leakage at level of hand pump unions.

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close main landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Close cargo compartment doors (Ref. 52-33-00, P. Block 1).
(4)Remove warning notices.

ELECTRO MECHANICAL SELECTOR VALVE (9MJ - 10MJ) - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE
R ON OR NEAR CARGO DOORS (REF. 52-30-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A. 98A52307523000	Support Struts - FWD and AFT Cargo Compartment Doors
B.	Warning Notice
C.	Container
D. Material No. 02-003	Hydraulic Fluids (Ref. 20-31-00)
Referenced Procedures	
- 12-12-29, P. Block 1	Hydraulics
- 24-41-00, P. Block 301	AC External Power Control
- 29-00-00, P. Block 301	Hydraulic Power
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)
- 52-33-00, P. Block 1	Cargo Compartment Door Hydraulic System
- 52-33-00, P. Block 301	Cargo Compartment Door Hydraulic System

2. Procedure

A. Job Set-Up
(1)Open cargo compartment doors (Ref. 52-33-00, P. Block 1) and install cargo compartment door support struts.
(2)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Display a warning notice on HYDRAULIC panel prohibiting operation of the Yellow system.
(4)Depressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(5)Depressurize Yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(6)Open, safety and tag the following circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
133VU	ACCU PRESS/CTL &/CARGO DOOR/PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B5

(7)Drain Yellow hydraulic reservoir (Ref. 29-00-00, P. Block 301).

B. Removal

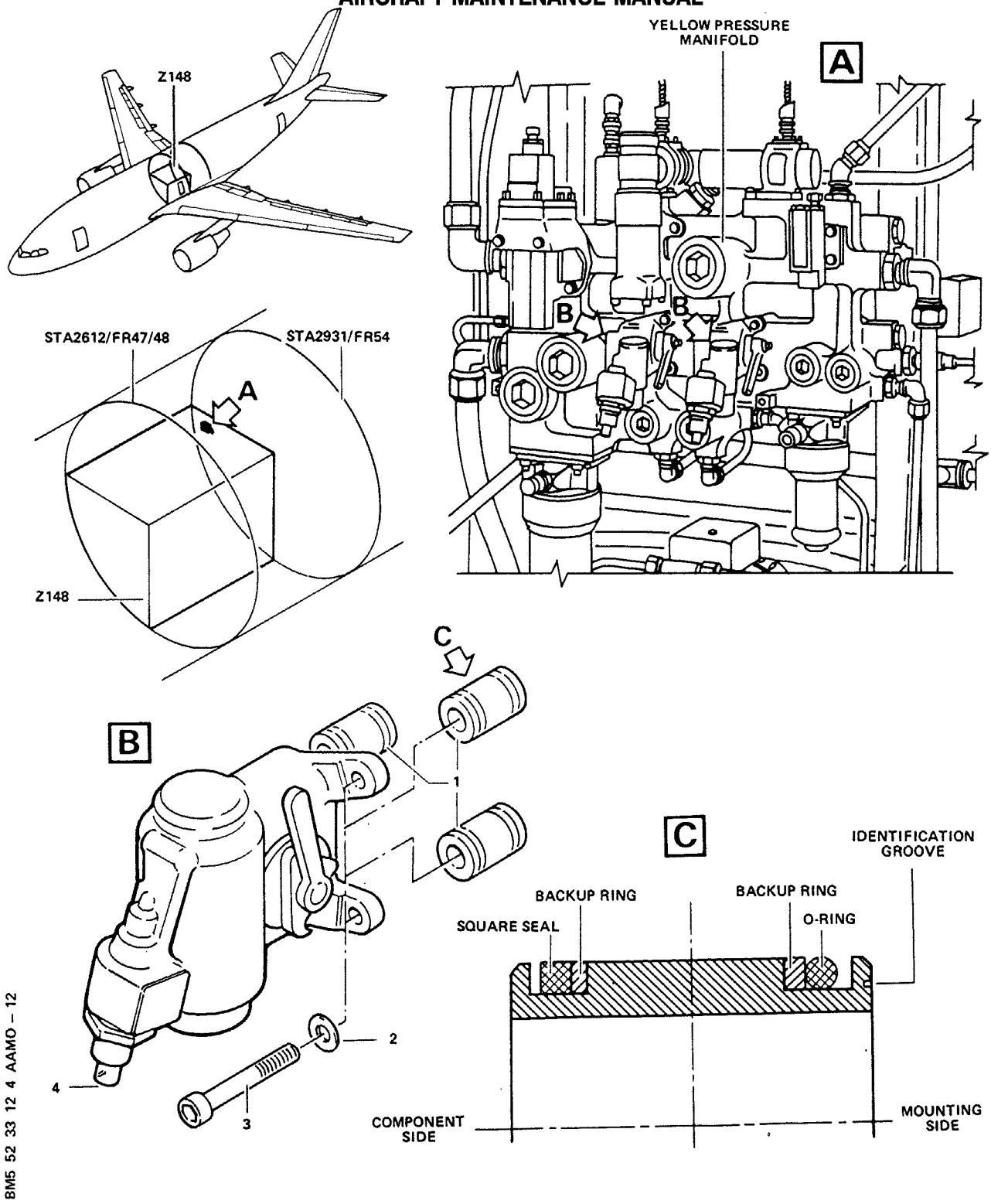
(Ref. Fig. 401)
(1)Disconnect electrical connector (4).
(2)Place a container under electro mechanical selector valve.
(3)Remove lockwire ; remove the three screws (3), retain washers (2).
(4)Remove the valve.

C. Preparation of Replacement Component
(1)Lubricate replacement valve with hydraulic fluid No.02-003 and install three bobbins (1) fitted with new seals.
CAUTION : THE GROOVED END OF THE BOBBINS IS TO BE INSERTED IN THE MANIFOLD PORTS.

D. Installation
(1)Install the electro-mechanical selector valve on manifold.
(2)Install the three screws (3) equipped with washers.
(3)Tighten and wirelock screws (3) and TORQUE to between 0.3 and 0,4 m.daN (26.61 and 35.5 lbf.in.)
(4)Connect electrical connector.

E. Test
(1)Replenish yellow hydraulic reservoir (Ref. 12-12-29, P. Block 1).
(2)Pressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(3)Bleed hydraulic system using door actuator (Ref. 52-33-00, P. Block 301)
(4)Remove support struts.
(5)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(6)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301). Make certain that electronics racks ventilation is correct.
(7)On panel 9VU, press PARKING BRAKE ACCU PRESS pushbutton switch. On panel 4VU, check that ACCU PRESS indicator rises and stabilizes at green band.
(8)Check for hydraulic fluid leaks at level of valve and manifold.

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close main landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Close cargo compartment doors (Ref. 52-33-00, P. Block 1).
(4)Remove warning notices.
(5)De-energize the aircraft electrical network ground power unit (Ref. 24-41-00, P. Block 301).



Selector Valve - 9MJ - 10MJ
Figure 401

CHECK VALVE (3389) - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE
R ON OR NEAR CARGO DOORS (REF. 52-30-00, P. BLOCK 301).

1. Equipment and Materials

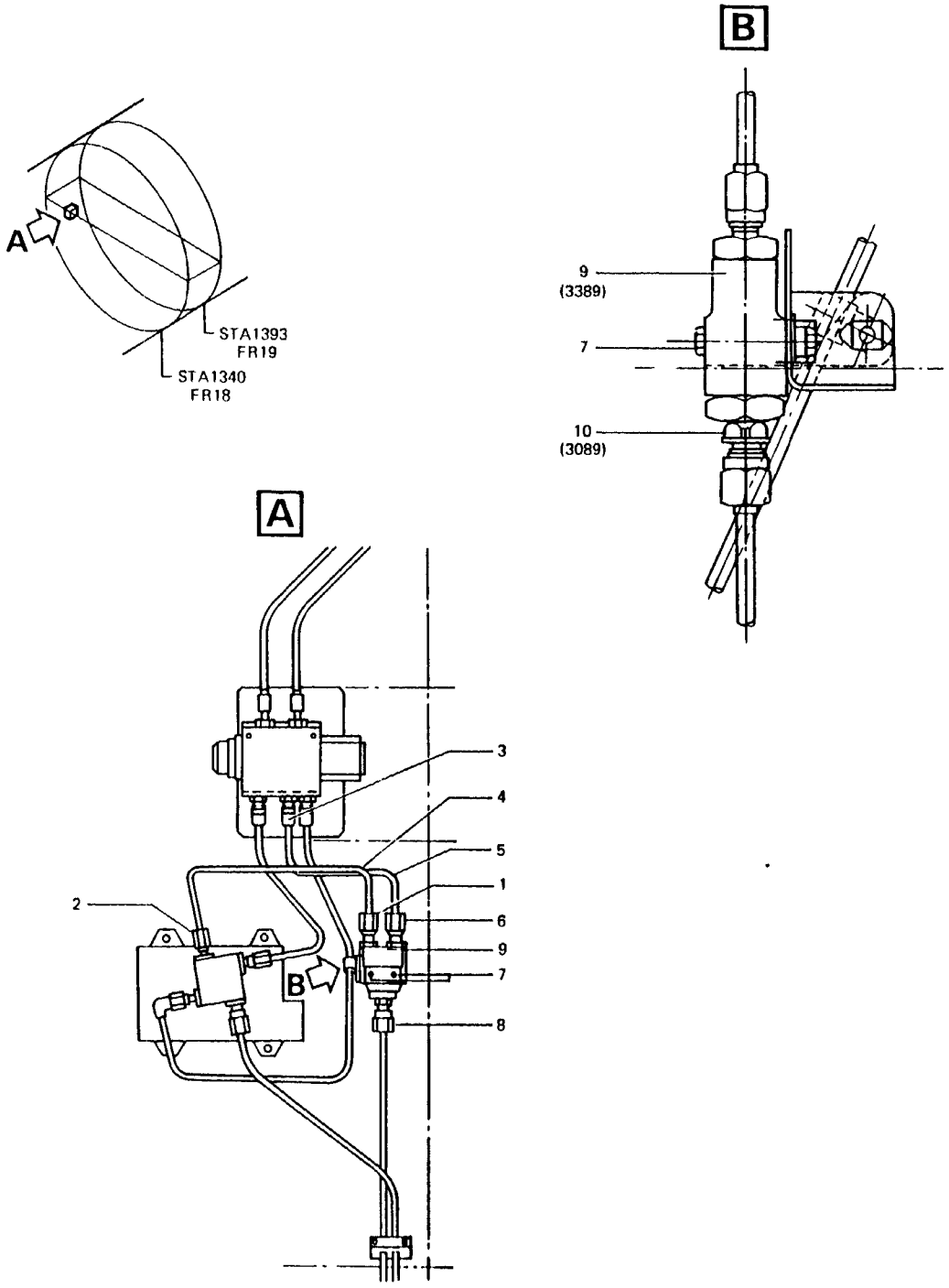
ITEM	DESIGNATION
A. 98A52307523000	Support Struts - FWD and AFT Cargo Compartment Doors
B.	Container
C.	Warning Notices
Referenced Procedures	
- 12-12-29, P. Block 1	Hydraulics
- 29-10-00, P. Block 301	Main Hydraulic Power Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 32-12-11, P. Block 301	Main Gear Main Door (Ground Door(s) Opening
- 52-33-00, P. Block 1	Cargo Compartment Door Hydraulic System

2. Procedure

A. Job Set-Up
(1)Open cargo compartment doors (Ref. 52-33-00, P. Block 1) and install cargo compartment door support struts.
(2)Display a warning notice on cargo compartment control valve selector to prohibit closing of doors.
(3)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
(4)Depressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(5)Depressurize Yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(6)Open avionics compartment access door 132AZ.

B. Removal
(Ref. Fig. 401)
(1)Place a container under the check valve.
(2)Remove unions (1), (2), (3), (6) and (8) and remove lines (4), (5).
(3)Remove screws (7).
(4)Remove manifold equipped with check valve (10).
(5)Remove check valve (10) from manifold.

C. Preparation of Replacement Component
(1)On manifold, install check valve (10) equipped with new O-ring. Lubricate O-ring with hydraulic fluid.



BM5 52 33 13 4 BAMO – 10

Check Valve 3389
Figure 401

D. Installation
(1)Install manifold assy (9). Secure with screws (7).
(2)Install lines (4), (5), screw unions (1), (2), (3), (6) and (8).
(3)Remove container.

E. Test

(1)Pressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(2)Bleed hydraulic system using door actuator (Ref. 52-33-00, P. Block 301).
(3)Remove support struts.
(4)Check for leaks at level of check valve and unions.
(5)If necessary, top up Yellow hydraulic reservoir (Ref. 12-12-29, P. Block 1).

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Close access door 132AZ and cargo compartment doors (Ref. 52-33-00, P. Block 1).
(4)Remove warning notices.

CHECK VALVE (3390) - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE
R ON OR NEAR CARGO DOORS (REF. 52-30-00, P. BLOCK 301).

1. Equipment and Materials

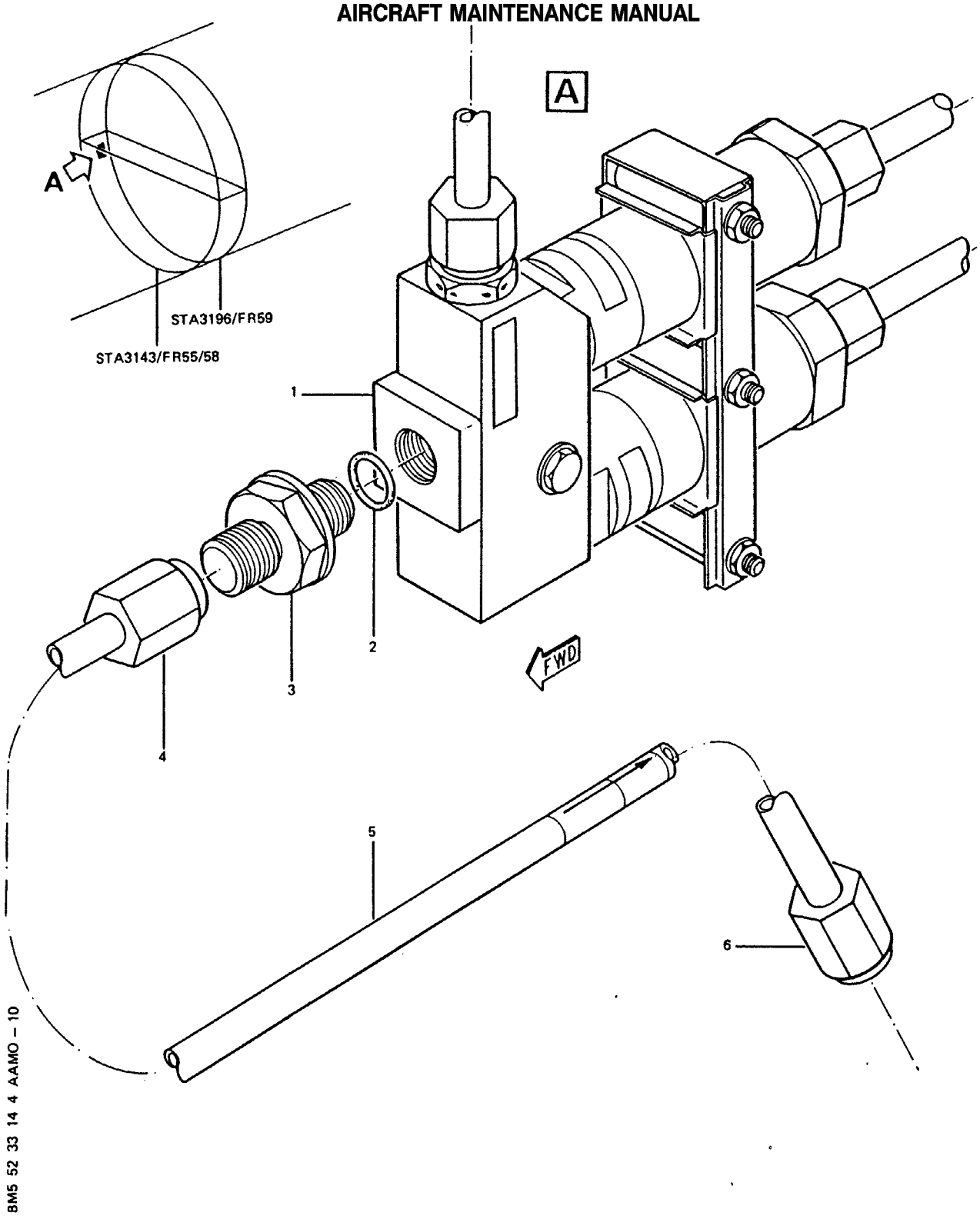
ITEM	DESIGNATION
A. 98A52307523000	Support Struts - FWD and AFT Cargo Compartment Doors
B.	Container
C.	Warning Notices
Referenced Procedures	
- 12-12-29, P. Block 1	Hydraulics
- 29-10-00, P. Block 301	Main Hydraulic Power-Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 32-12-11, P. Block 301	Main Gear Main Door (Ground Door(s) Opening)
- 52-33-00, P. Block 1	Cargo Compartment Door Hydraulic System

2. Procedure

A. Job Set-Up
(1)Open cargo compartment doors (Ref. 52-33-00, P. Block 1) and install cargo compartment door support struts.
(2)Display a warning notice on cargo compartment control valve selector to prohibit closing of doors.
(3)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
(4)Depressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(5)Depressurize Yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(6)Open furnishing panel 152KW.

B. Removal
(Ref. Fig. 401)
(1)Place a container under the check valve.
(2)Remove the two unions (4) (6) and remove line (5).
(3)Remove check valve 3390 (3); discard O-ring (2).

C. Installation
(1)Install O-ring (2) on check valve (3). Lubricate O-ring with hydraulic fluid.
(2)Install check valve (3) on manifold (1).
(3)Install line (5). Tighten unions (4) and (6).



Check Valve 3390
Figure 401

D. Test
(1)Pressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(2)Bleed hydraulic system using door actuator (Ref. 52-33-00, P. Block 301).
(3)Remove support struts.
(4)Check for leaks at level of check valve and unions.
(5)If necessary, top up Yellow hydraulic reservoir (Ref. 12-12-29, P. Block 1).

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Close access door 132AZ and cargo compartment doors (Ref. 52-33-00, P. Block 1).
(4)Remove warning notices.

CONTROL VALVE 15MJ, 16MJ - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.

WARNING : BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.

WARNING : BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.

CAUTION : WHENEVER CARGO COMPARTMENT DOORS REMAIN OPEN DURING MAINTENANCE ON YELLOW HYDRAULIC SYSTEM (DISCONNECTION OF HYDRAULIC LINES OR REPLACEMENT OF HYDRAULIC COMPONENTS), BLEED DOOR ACTUATOR AND PRESSURIZE LINES PRIOR TO CLOSING DOOR (REF. 52-33-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B.	Warning Notice
C.	Blanking Plugs and Caps
D.	Spillage Container
E.	Circuit Breaker Safety Clips and Tags
F. Material No. 08-007	Bonding and Adhesive Compounds (Ref. 20-31-00)

Referenced Procedures

- 12-12-29, P. Block 1	Hydraulics
- 24-41-00, P. Block 301	AC External Power Control
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-33-00, P. Block 301	Cargo Compartment Door Hydraulic System

2. Procedure

A. Job Set-Up

(1) Position access platform.

(2) Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(3) Make certain that electronics racks ventilation is correct.

(4) Open FWD or AFT cargo compartment door corresponding to manual control valve 15MJ or 16MJ to be removed (Ref. 52-30-00, P. Block 1).

(5) Install door actuator safety lock to FWD or AFT cargo compartment door actuator (Ref. 52-30-00, P. Block 301).

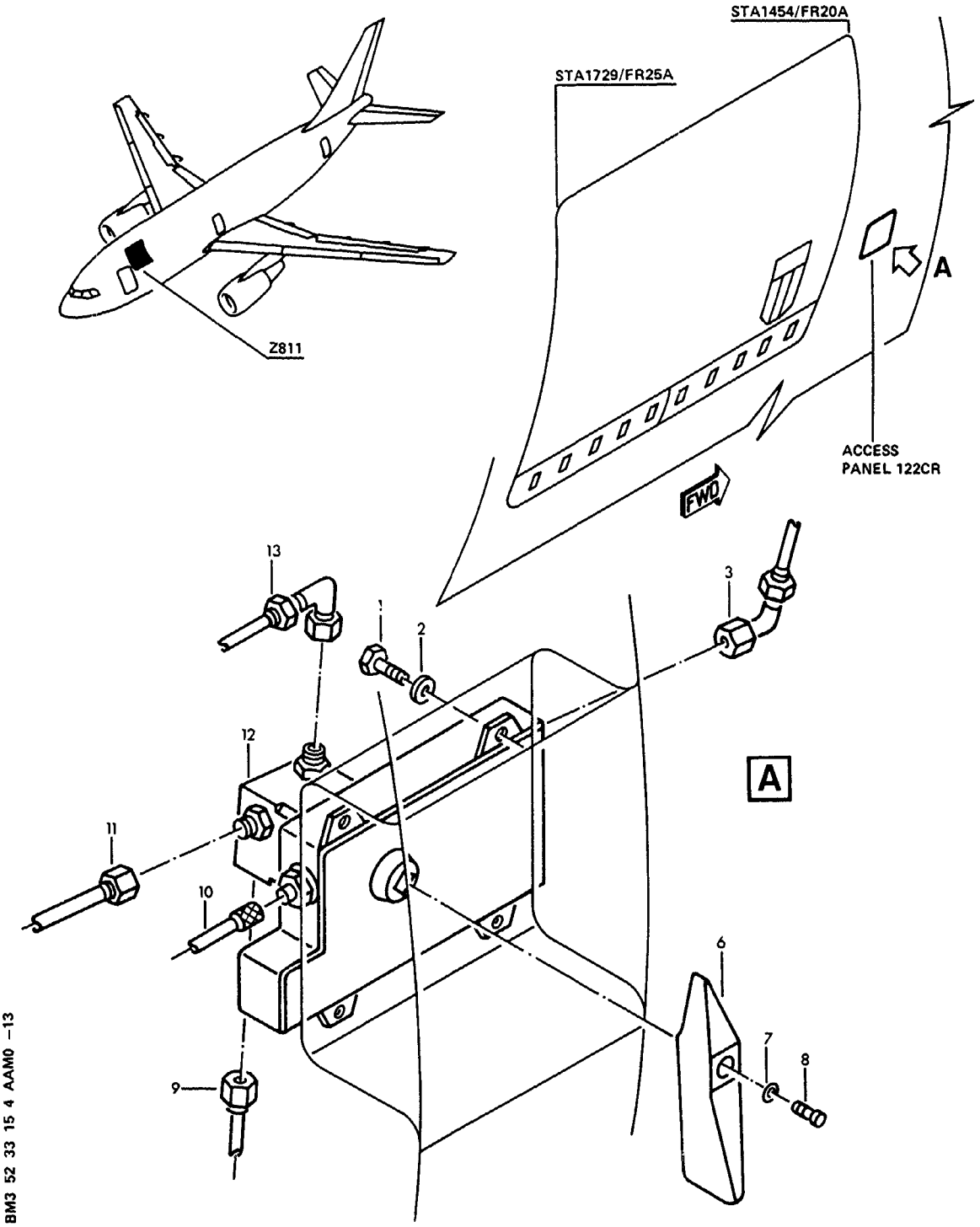
(6) Open main gear main doors (Ref. 32-12-11, P. Block 301).

(7) Open, safety and tag the following circuit breakers:

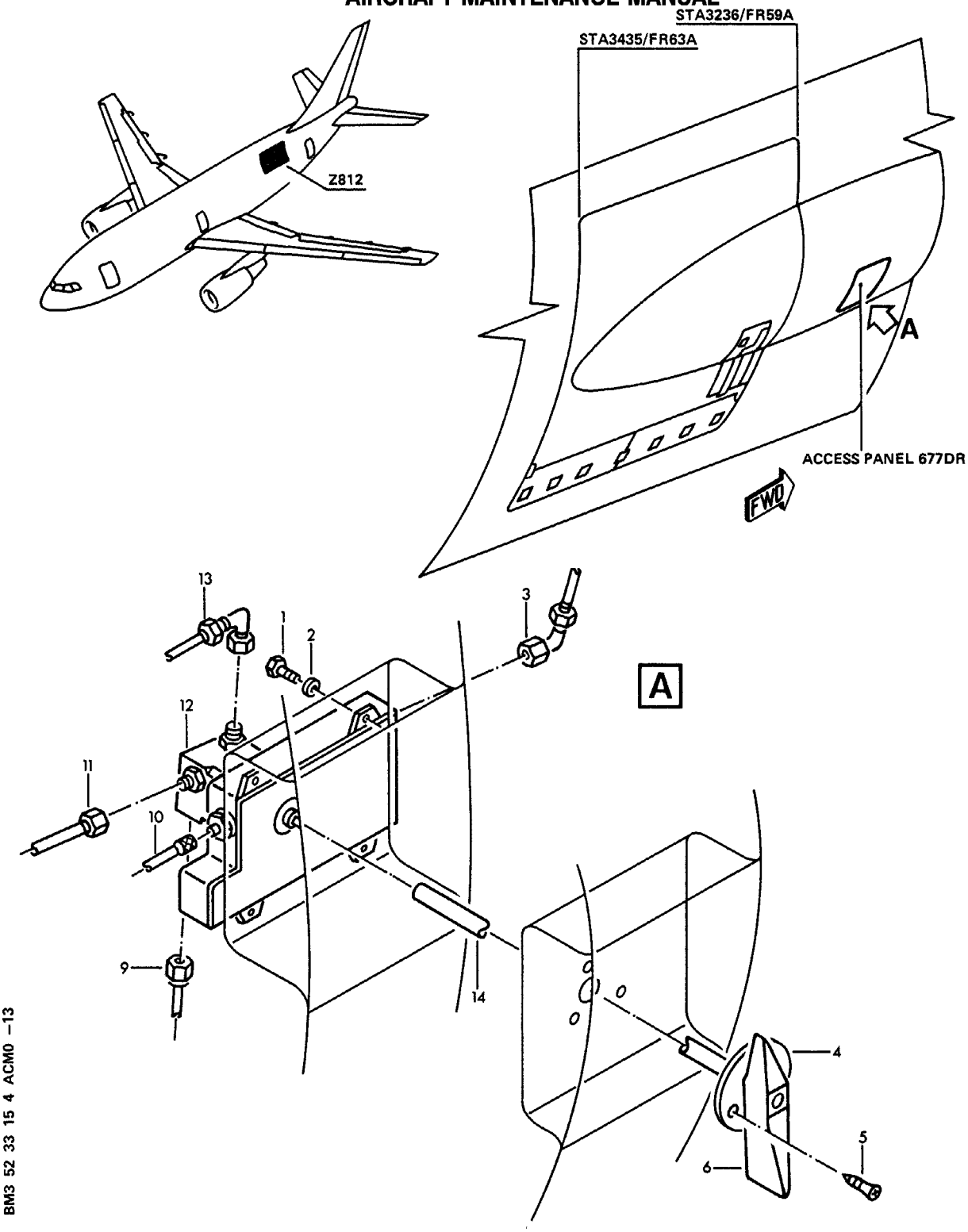
	PANEL	SERVICE	IDENT.	LOCATION
R	133VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR PUMP	7GX	333/T51
R	101VU	ELEC HYD PUMP	23GX	GEN2/B08
R	133VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR CTL	2MJ	333/T52

(8)Depressurize reservoir of yellow hydraulic system (Ref. 29-14-00, P. Block 301).
(9)Depressurize yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(10)Display a warning notice on panel 427VU prohibiting operation of the yellow hydraulic system.
(11)Open avionics compartment access door 132AZ and remove insulation mat between STA1340/FR18 and STA1391/FR19 to gain access to manual control valve 15MJ (4).
(12)Remove sidewall panel and insulation mat on RH side of AFT cargo compartment between STA3143/FR55/58 and STA3196/FR59 to gain access to manual control valve 16MJ.
(13)Open access panel 122CR (677DR) to gain access to service panel of affected manual control valve 15MJ (16MJ).

B. Removal
(Ref. Fig. 401)
(Ref. Fig. 402)
(1)Manual Control Valve 15MJ (Zone 132)
(a)Position spillage container under hydraulic connections of control valve (12) and protect adjacent structure with lint-free cloth.
(b)Disconnect electrical connector (10) and blank off open ends.
(c)Remove screw (8) with washer (7) and selector lever (6) from control valve (12).
(d)Disconnect hydraulic lines (3),(9),(11),(13) from control valve and install blanking plugs on pipe ends and valve connections.
(e)Remove and retain screws (1) and washers (2) from control valve (12).
(f)Remove control valve (12) from service panel.
(2)Manual Control Valve 16MJ (Zone 152)
(a)Position spillage container under hydraulic connections of control valve (12) and protect adjacent structure with lint-free cloth.
(b)Disconnect electrical connector (10) and blank off open ends.
(c)Remove screws (5) and pull out valve extension (14) together with selector lever (6) and flange (4).
(d)Disconnect hydraulic lines (3),(9),(11),(13) from control valve (12) and install blanking plugs on pipe ends and valve connections.
(e)Remove and retain screws (1) and washers (2) from control valve (12).
(f)Remove control valve (12) from service panel.



Manual Control Valve 15MJ - Zone 132
Figure 401



Manual Control Valve 16MJ - Zone 152
Figure 402

C. Installation

(1)Manual Control Valve 15MJ (Zone 132)

(a)Position control valve (12) on service panel.

(b)Install washers (2) and screws (1) on control valve (12) and tighten.

(c)Position selector lever (6) on control valve (12) and attach it with washer (7) and screw (8).

(d)Safety the screw (8) with thread locking compound (Material No. 08-007).

(e)Remove blanking plugs and connect hydraulic lines (3),(9),(11),(13) with connections of control valve (12).

(f)Remove blanking caps and connect electrical connector (10) with control valve (12).

(g)Bleed door hydraulic system (Ref. 52-33-00, P. Block 301).

(h)Replenish yellow hydraulic system reservoir as necessary (Ref. 12-12-29, P. Block 1).

(2)Manual Control Valve 16MJ (Zone 152)

(a)Position control valve (12) on service panel.

(b)Install washers (2) and screws (1) on control valve (12) and tighten.

(c)Position valve extension (14) together with selector lever (6) and
R flange (4) on control valve (12).

R (d)Install the screws (5) to attach the flange (4) on the panel structure.

(e)Remove blanking plugs and connect hydraulic lines (3),(9),(11),(13) with connections of control valve (12).

(f)Remove blanking caps and connect electrical connector (10) with control valve (12).

(g)Bleed door hydraulic system (Ref. 52-33-00, P. Block 301).

(h)Replenish yellow hydraulic system reservoir if necessary (Ref. 12-12-29, P. Block 1).

D. Test

(1)Remove safety clips and tags and close circuit breakers 7GX and 23GX.

(2)Pressurize yellow hydraulic system (Ref. 29-10-00, P. Block 301).

(3)Pressurize reservoir of yellow hydraulic system (Ref. 29-14-00, P. Block 301).

(4)Carry out an operational test of the FWD and AFT cargo compartment doors (Ref. 52-33-00, P. Block 301).

(5)Check for leaks at control valve 15MJ (16MJ) and hydraulic connections.

E. Close-Up

(1)Remove spillage container and lint-free cloths.

(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(3)Install insulation mat to cover manual control valve 15MJ and close avionics compartment access door 132AZ.

(4)Install sidewall panel and insulation mat to cover manual control valve 16MJ.

(5)Close access panel of affected service panel.

(6)Remove warning notice from panel 427VU.

(7)Close main gear main doors (Ref. 32-12-11, P. Block 301).

(8)Remove door actuator safety lock (Ref. 52-30-00, P. Block 301).

(9)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(10)Remove access platform.

RESTRICTOR VALVE - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
WARNING : BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
WARNING : BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.
CAUTION : WHENEVER CARGO COMPARTMENT DOORS REMAIN OPEN DURING MAINTENANCE ON YELLOW HYDRAULIC SYSTEM (DISCONNECTION OF HYDRAULIC LINES OR REPLACEMENT OF HYDRAULIC COMPONENTS), BLEED ACTUATOR AND PRESSURIZE LINES PRIOR TO CLOSING DOOR (REF. 52-33-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B.	Spillage Container
C.	Blanking Caps
D.	Warning Notice Prohibiting the Operation of the Yellow Hydraulic System
E.	Circuit Breaker Safety Clips and Tags
F. Material No. 02-003	Hydraulic Fluids (Ref. 20-31-00)

Referenced Procedures

- 12-12-29, P. Block 1	Hydraulics
- 24-41-00, P. Block 301	AC External Power Control
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-33-00, P. Block 301	Cargo Compartment Door Hydraulic System

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)Install support struts to safety the opened FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 301).
(6)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC HYD PUMP	23GX	GEN2/B7

(7)Depressurize yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(8)Depressurize reservoir of yellow hydraulic system (Ref. 29-14-00, P. Block 301).
(9)Display a warning notice on panel 427VU prohibiting operation of the yellow hydraulic system.

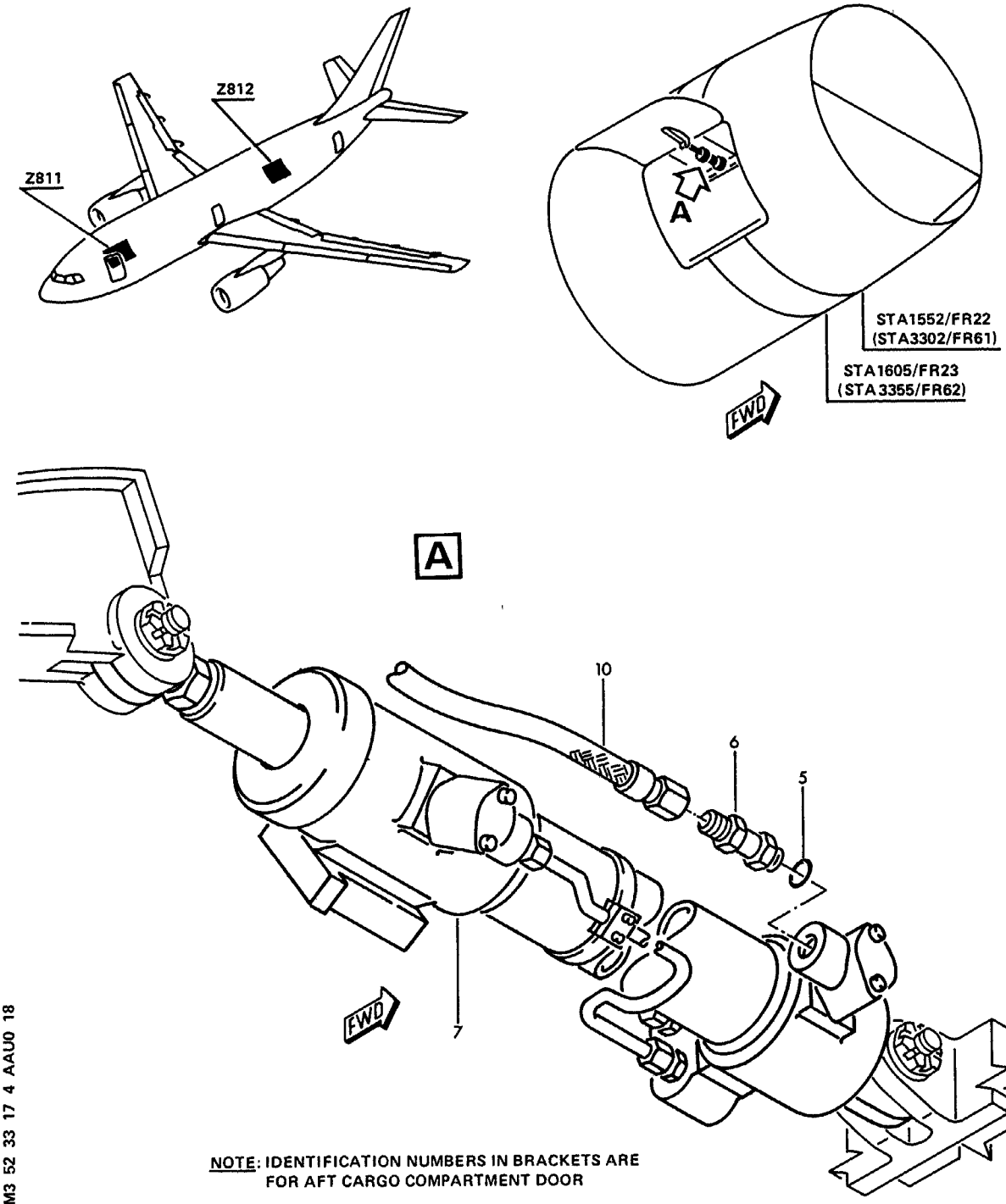
B. Removal
(Ref. Fig. 401)
(1)Position spillage container under door actuator (7) and disconnect flexible hydraulic hose (10) from restrictor/check valve (6).
(2)Remove restrictor/check valve (6) from door actuator (7).
(3)Install blanking caps on open ends of flexible hydraulic hose (10), door actuator (7) and restrictor check valve (6).

C. Preparation for Installation
(1)Lubricate O-ring (6) with hydraulic fluid (Material No. 02-003).
(2)Position new O-ring (5) to replacement restrictor/check valve (6).

D. Installation
(1)Remove blanking caps from restrictor/check valve (6), flexible hydraulic hose (10) and door actuator (7).
(2)Install restrictor/check valve (6) to door actuator (7).
(3)Connect flexible hydraulic hose (10) to restrictor/check valve (6).

E. Test
(1)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(2)Pressurize yellow hydraulic system (Ref. 29-24-00, P. Block 301).
(3)Make certain that door hydraulic system is correctly bled (Ref. 52-33-00, P. Block 301).
(4)Make certain that support struts are not under load and remove support struts from cargo compartment door (Ref. 52-30-00, P. Block 301).
(5)Open and close cargo compartment door (Ref. 52-30-00, P. Block 1). Make certain that green indicator light on service panel comes on when door actuator is fully extended and its internal mechanical lock is engaged.
(6)Check connection of restrictor/check valve (6) and door actuator (7) and flexible hydraulic hose (10) for leakage of hydraulic fluid.
(7)Replenish yellow hydraulic system reservoir (Ref. 12-12-29, P. Block 1).

F. Close-Up
(1)Remove spillage container located under door actuator.
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Close FWD and AFT cargo compartment doors (Ref. 52-30-00, P. Block 1).
(4)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(5)Remove warning notice from panel 427VU.
(6)Remove access platform.



Restrictor/Check Valve -
Connection to Door Actuator
Figure 401

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
WARNING : BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
WARNING : BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.
CAUTION : WHENEVER CARGO COMPARTMENT DOORS REMAIN OPEN DURING MAINTENANCE ON YELLOW HYDRAULIC SYSTEM (DISCONNECTION OF HYDRAULIC LINES OR REPLACEMENT OF HYDRAULIC COMPONENTS), BLEED ACTUATOR AND PRESSURIZE LINES PRIOR TO CLOSING DOOR (REF. 52-33-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B.	Spillage Container
C.	Trammel for Actuator
D.	Clinometer
E.	Warning Notice Prohibiting Operation of the Yellow Hydraulic System
F.	Blanking caps
G. Material No. 05-002	Special Materials (Ref. 20-31-00)
H. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 12-12-29, P. Block 1	Hydraulics
- 20-28-11, P. Block 1	Electrical Bonding
- 24-41-00, P. Block 301	AC External Power Control
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 29-24-00, P. Block 301	Yellow Auxiliary Power (Electric Pump)
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-31-11, P. Block 501	FWD Cargo Compartment Door
- 52-32-11, P. Block 501	AFT Cargo Compartment Door
- 52-33-00, P. Block 301	Cargo Compartment Door Hydraulic System

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)Install support struts on FWD or AFT cargo compartment door as required (Ref. 52-30-00, P. Block 301).

(6)Depressurize yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(7)Depressurize yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(8)Open, safety and tag the following circuit breakers:

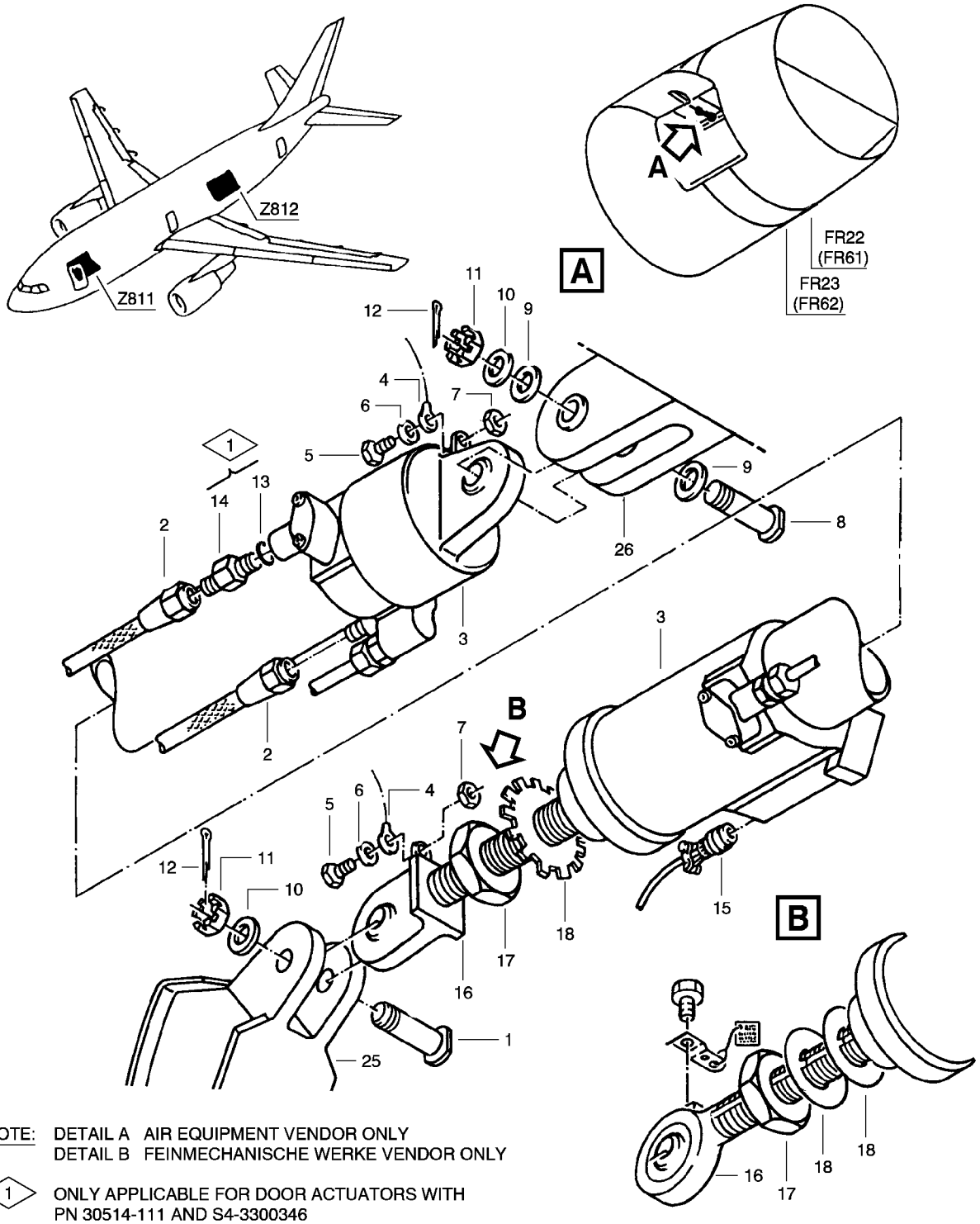
PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B7

(9)Display warning notice on panel 427VU prohibiting operation of the yellow hydraulic system.

B. Removal
(Ref. Fig. 401)
(1)Remove and discard cotter pins (12) on both ends of actuator attachment.
(2)Support door actuator (3) and remove castle nut (11), washer (10) and bolt (1) from actuator attachment fitting (25).
(3)Operate hand pump (Ref. 52-30-00, P. Block 1) to release the internal mechanical locking device of door actuator (3) and stop it when actuator piston rod is fully retracted.
(4)Position spillage container under door actuator (3) and disconnect flexible hydraulic hoses (2) from restrictor/check valve (14) and from retraction port of door actuator (3).
(5)Install blanking caps on open ends of door actuator (3), restrictor/check valve (14) and flexible hydraulic hoses (2).
(6)Disconnect electrical connector (15) from limit switch 7MJ (8MJ) of door actuator (3) and blank off connections.
(7)Remove nuts (7), washers (6), screws (5) and bonding straps (4) from door actuator (3).
NOTE : Bonding straps (4) remain attached to the structure.
(8)Support door actuator (3) and remove castle nut (11), washer (10), bolt (8), spacer (9) and door actuator (3) from actuator beam (26).
(9)Put a label on the removed door actuator with following instructions:
Before door actuator is installed on door attachment fitting,
extend and retract piston rod of door actuator ten times to bleed
door hydraulic system.

R ** ONLY FOR DOOR ACTUATORS WITH PN 30514-111 AND S4-3300346

(10)Remove restrictor/check valve (14) from door actuator (3).
(11)Remove O-ring (13) from restrictor/check valve (14). Discard O-ring.



BM6 52 33 18 4 AAU0 02

FWD and AFT Door Actuator
Figure 401

R

C. Preparation for Installation
(1)Extend door actuator (3) until internal mechanical lock is engaged.
(2)Adjust eye-end (16) until a nominal dimension of 1087 +1 mm (42.796 +0.04 in.) (pre-setting measurement) is obtained between eye-end centers of door actuator.
(3)Tighten locknut (17) on eye-end (16). Do not safety.

R ** ONLY FOR DOOR ACTUATORS WITH PN 30514-111 AND S4-3300346

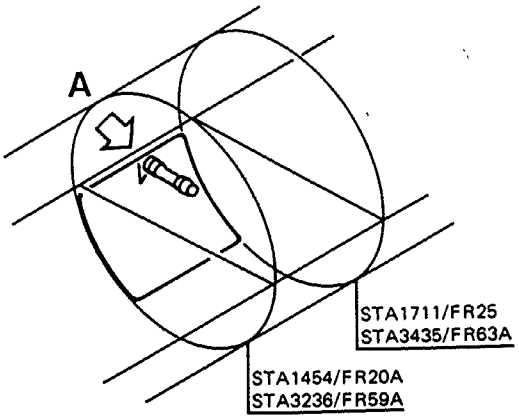
(4)Lubricate new O-ring (13) with hydraulic fluid of spillage container and position it on restrictor/check valve (14).
(5)Install restrictor/check valve (14) together with new O-ring (13) on door actuator (3).

R
R ** FOR ALL DOOR ACTUATORS

(6)If necessary, remove the label from the door actuator (3) attached during the removal procedure.

D. Installation
(1)Position door actuator (3) on actuator beam (26) and install bolt (8) with Mastinox (Material No. 05-002), spacers (9), washer (10) and castle nut (11).
(2)Remove blanking caps and install flexible hydraulic hoses (2) on restrictor/check valve (14) and retraction port of door actuator (3).
(3)Bleed the door hydraulic system of cargo compartment door (Ref. 52-33-00, P. Block 301) and check connections of the door actuator (3) for leakage.
(4)Align bore door actuator eye-end with bore of actuator attachment fitting (25) and install bolt (1) with Mastinox (Material No. 05-002), washer (10) and castle nut (11).
(5)Remove blanking caps and connect electrical connector (15) to limit switch 7MJ (8MJ).
(6)Secure connector (15) with lockwire.
(7)Install bonding straps (4) on door actuator (3) with screws (5), washers (6) and nuts (7). Tighten nuts.

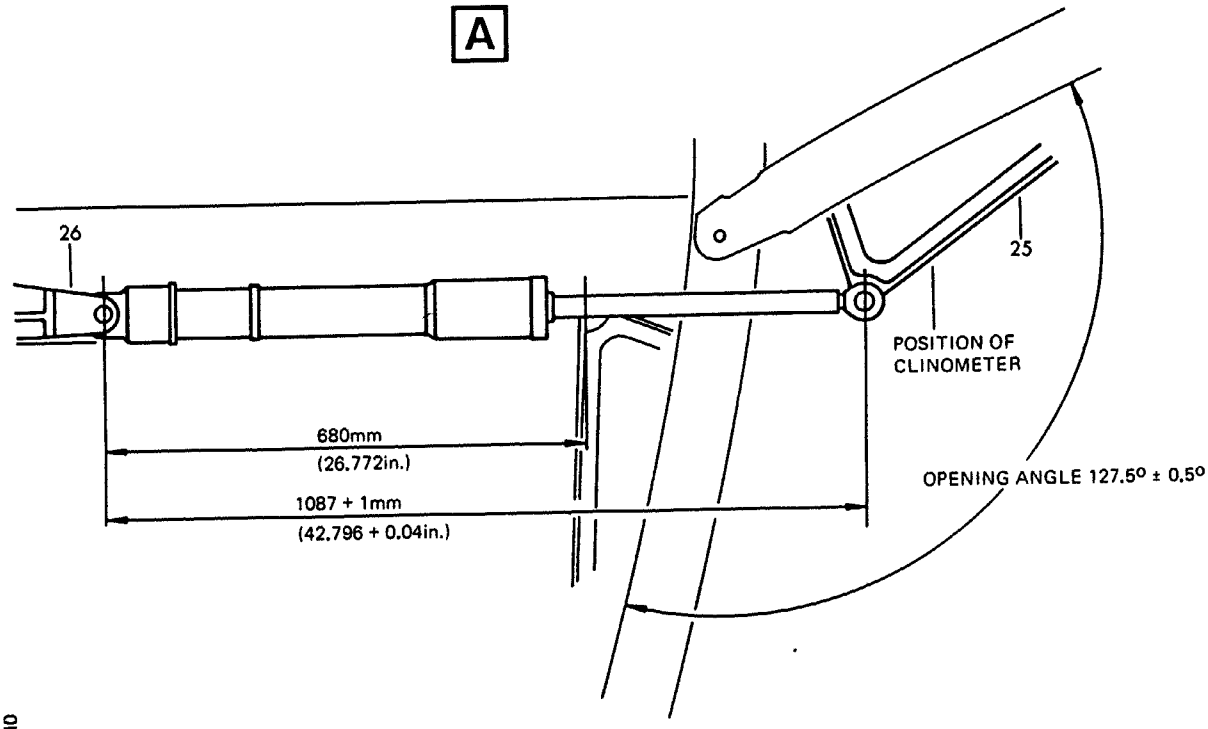
E. Test
(Ref. Fig. 402)
(Ref. Fig. 403)
(1)Remove support struts from FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 301).
(2)Remove safety clips and tags and close circuit breakers 7GX amd 23GX.
(3)Make certain that the door hydraulic system is correctly bled (Ref. 52-33-00, P. Block 301).
(4)Pressurize yellow auxiliary hydraulic system (Ref. 29-24-00, P. Block 301).
(5)Check door opening angle as follows:
(a)Close FWD or AFT cargo compartment door (Ref. 52-30-00, P. Block 1).
(b)Position and mark location of clinometer at actuator attachment fitting (25) and note number of degrees.
(c)Open FWD or AFT cargo compartment door until door actuator (3) is fully



LENGTH OF HYDRAULIC ACTUATOR WITH CARGO COMPARTMENT DOOR CLOSED 680mm(26.772in.)

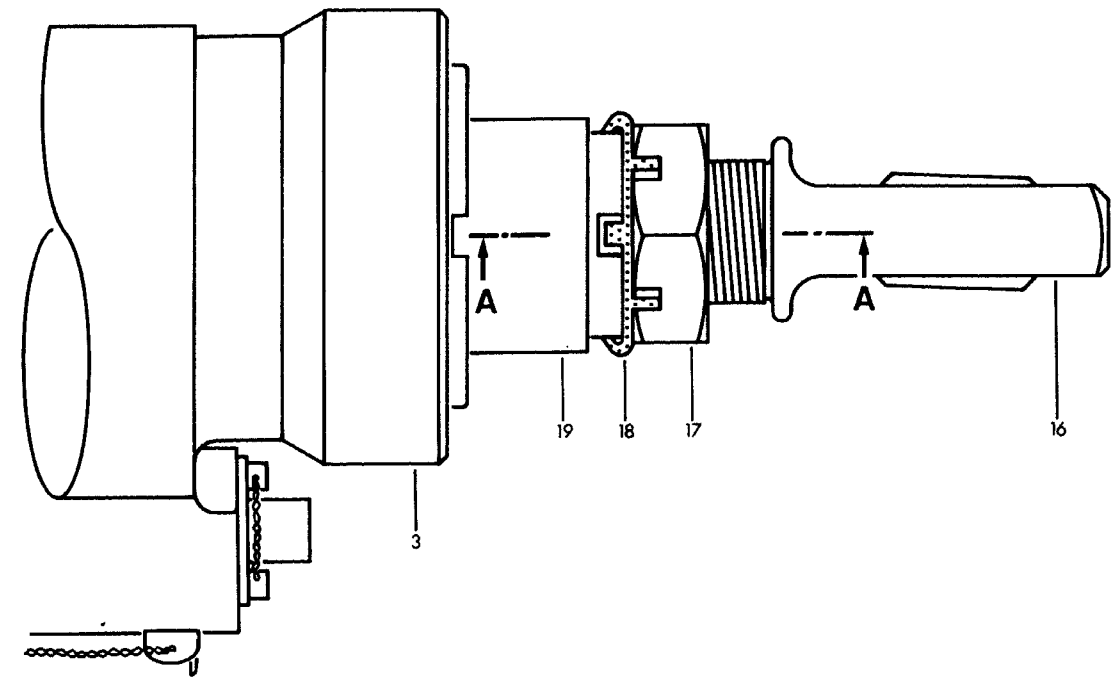
THEORETICAL PISTON STROKE FOR DOOR OPENING ANGLE 409.2mm(16.110in.)

FWD AND AFT CARGO COMPARTMENT DOOR OPENING ANGLE 127.5° ± 0.5°

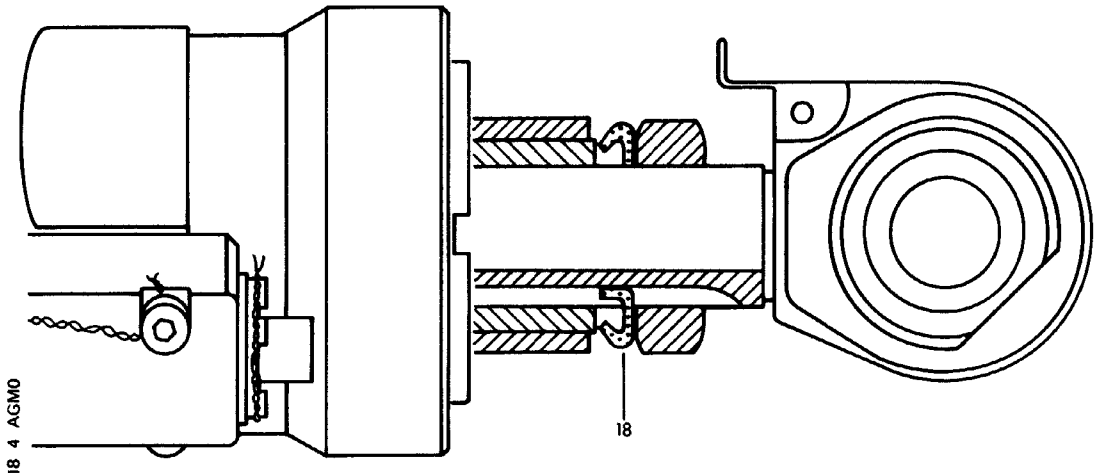


BM3 52 33 18 4 ACMD

Adjustment of Door Opening Angle
Figure 402



SECTION
A–A



BM3 52 33 18 4 AGM0

Installation of Safetying Lockwasher
Figure 403

extended and the internal mechanical locking is engaged (Ref. 52-30-00, P. Block 1).

(d)Position clinometer at the marked location on actuator attachment fitting (25) and note number of degrees.
- opening angle of FWD or AFT cargo compartment door must be 127.5 ±0.5°.

NOTE : Make certain that there is sufficient clearance between ceiling lining and piston rod of door actuator.

(e)If the door opening angle is out of tolerance, re-adjust eye-end (16) and re-check opening angle (Ref. step (d)).

(f)After adjustment of door actuator, close FWD or AFT cargo compartment door to make certain that door locking mechanism is easy to operate (Ref. 52-31-11, P. Block 501 and 52-32-11, P. Block 501).

(g)TORQUE castle nuts (11) of bolts (1),(8) to 2.0 m.daN (177 lbf.in.) and secure with new cotter pins (12).

** FOR AIR EQUIPMENT VENDOR ONLY

(h)TORQUE lock nut (17) of adjustable eye-end (16) to between 10 and 12 m.daN (885 and 1062 lbf.in.).

(j)Bend tabs of lock washer (18) alternately, so that four tabs are in slots of the locknut (17) and four tabs are engaged in the mating recess of the piston ram (Ref. Fig. 403).

CAUTION : DO NOT DAMAGE THE PISTON ROD DURING BENDING OF LOCK WASHER TAB.

** FOR FEINMECHANISCHE WERKE VENDOR ONLY

(h)TORQUE lock nut (17) of adjustable eye-end (16) to 17 m.daN (1505 lbf.in.).

(j)Safety the lock nut (17) to the safety-device (18) with lockwire, corrosion-resistant steel, dia 0.8 mm (0.032 in.).

** FOR ALL VENDORS

(6)Open and close FWD or AFT cargo compartment door and check that the green indicator light comes on when the door actuator is fully extended and the internal mechanical locking is engaged (Ref. 52-30-00, P. Block 1).

(7)Replenish yellow hydraulic system reservoir as necessary (Ref. 12-12-29, P. Block 1).

F. Close-Up

(1)Pressurize yellow hydraulic system (Ref. 29-10-00, P. Block 301).

(2)Spray all components that have been removed/installed or handled during the operations with protective film (Material No. 05-027).

(3)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(4)Close FWD or AFT cargo compartment door (Ref. 52-33-00, P. Block 301).

(5)De-energize the aircraft electrical network and disconnect electrical

ground power unit (Ref. 24-41-00, P. Block 301).

(6)Remove access platform.

PRESSURE RELIEF VALVE (3086) - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.

BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.

BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE
R ON OR NEAR CARGO DOORS (REF. 52-30-00, P. BLOCK 301).

1. Equipment and Materials

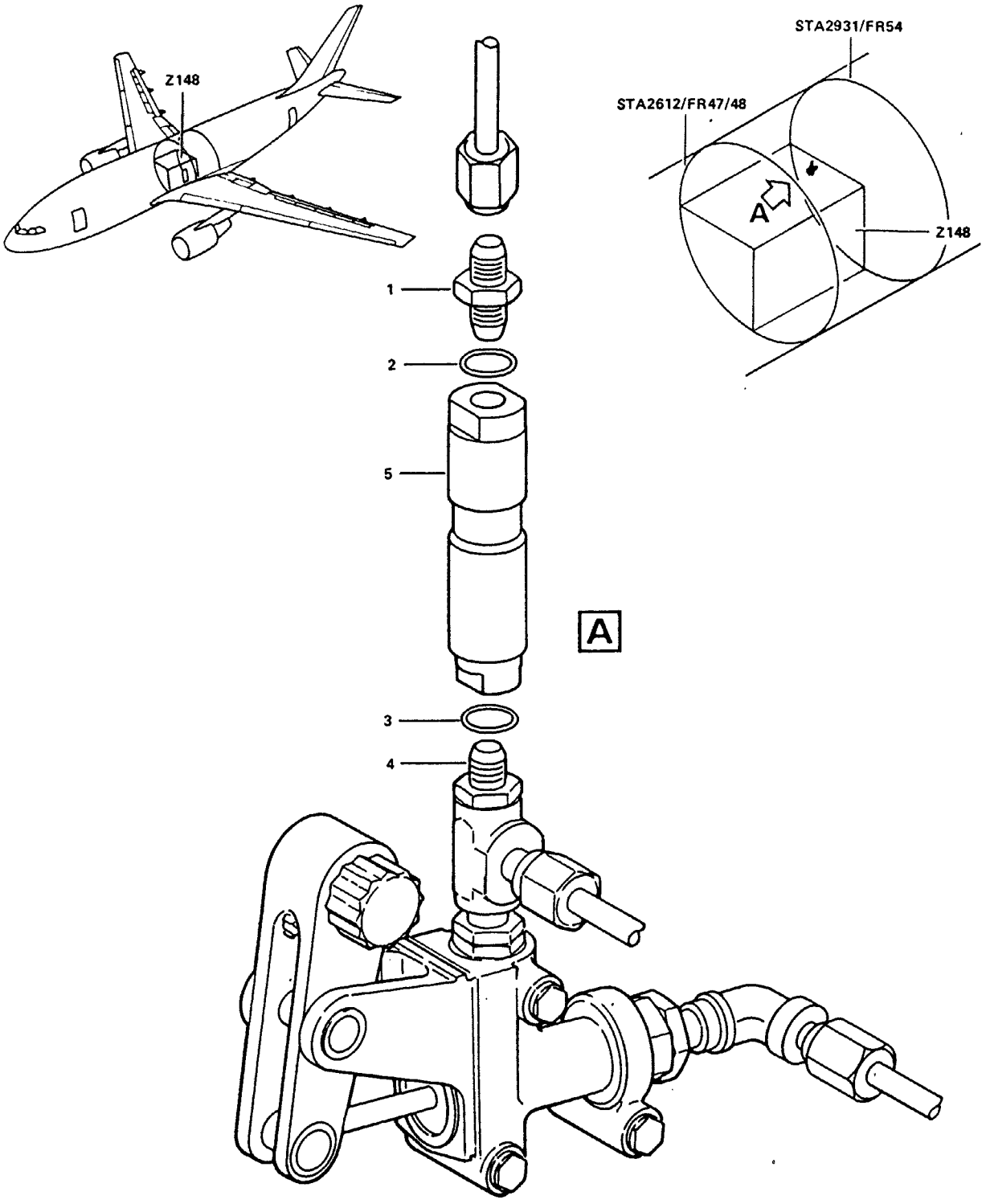
ITEM	DESIGNATION
A. 98A52307523000	Support Struts - FWD and AFT Cargo Compartment Doors
B.	Container
C.	Warning notices
Referenced Procedures	
- 12-12-29, P. Block 1	Hydraulics
- 29-00-00, P. Block 301	Hydraulic Power
- 29-10-00, P. Block 301	Main Hydraulic Power - Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 32-12-11, P. Block 301	Main Gear Main Door - (Ground Door(s) Opening)
- 52-33-00, P. Block 1	Cargo Compartment Door Hydraulic System

2 Procedure

A. Job Set-Up
(1)Open cargo compartment doors. (Ref. 52-33-00, P. Block 1).
(2)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Display a warning notice on control valve selector prohibiting closing of cargo compartment doors.
(4)Install cargo compartment door support struts.
(5)Depressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(6)Depressurize Yellow hydraulic system. (Ref. 29-10-00, P. Block 301).
(7)Drain Yellow hydraulic reservoir (Ref. 29-00-00, P. Block 301).

B. Removal (Ref. Fig. 401)
(1)Install a container under hand pump.
(2)Remove return line from union (1).
(3)Remove pressure relief valve (5) while holding union (4) with a flat wrench.
(4)Remove pressure relief valve (5).

C. Preparation of Replacement Component
(1)Remove union (1) from removed valve ; replace seal (2) and install union



BMS 52 33 22 4 AAMO – 10

Pressure Relief Valve (3086)
Figure 401

on the new valve.

D. Installation
(1)Replace seal (3) and install valve (5) on union (4).
(2)Connect hydraulic line on union (1) and tighten nut.

E. Test
(1)Replenish Yellow hydraulic reservoir (Ref. 12-12-29, P. Block 1).
(2)Pressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(3)Bleed hydraulic system using door actuator (Ref. 52-33-00, P. Block 301).
(4)Remove support struts.
(5)Check for leakage at level of valve unions.

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close main landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Close cargo compartment doors (Ref. 52-33-00, P. Block 1).
(4)Remove warning notices.

R SEQUENCE VALVES (3734) and (3735) - REMOVAL/INSTALLATION

WARNING : CHECK THAT LANDING GEAR GROUND SAFETIES INCLUDING WHEEL CHOCKS ARE IN POSITION.
BEFORE APPLYING OR RELIEVING HYDRAULIC SYSTEM PRESSURE, MAKE CERTAIN THAT THE TRAVEL RANGES OF THE CONTROL SURFACES ARE CLEAR.
BEFORE PRESSURIZING HYDRAULIC SYSTEMS, CHECK THAT ALL CONTROLS ARE SET TO CORRESPOND WITH THE ACTUAL POSITION OF THE SERVICES THEY OPERATE.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR CARGO DOORS (REF. 52-30-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A. 98A52307523000	Support Struts- FWD and AFT Cargo Compartment Doors
B.	Container
C.	Warning Notices
Referenced Procedures	
- 12-12-29, P. Block 1	Hydraulics
- 29-10-00, P. Block 301	Main Hydraulic Power Pressurization/ Depressurization
- 29-14-00, P. Block 301	Hydraulic Reservoir Pressurizing System
- 32-12-11, P. Block 301	Main Gear Main Door (Ground Door(s) Opening)
- 52-33-00, P. Block 1	Cargo Compartment Door Hydraulic System

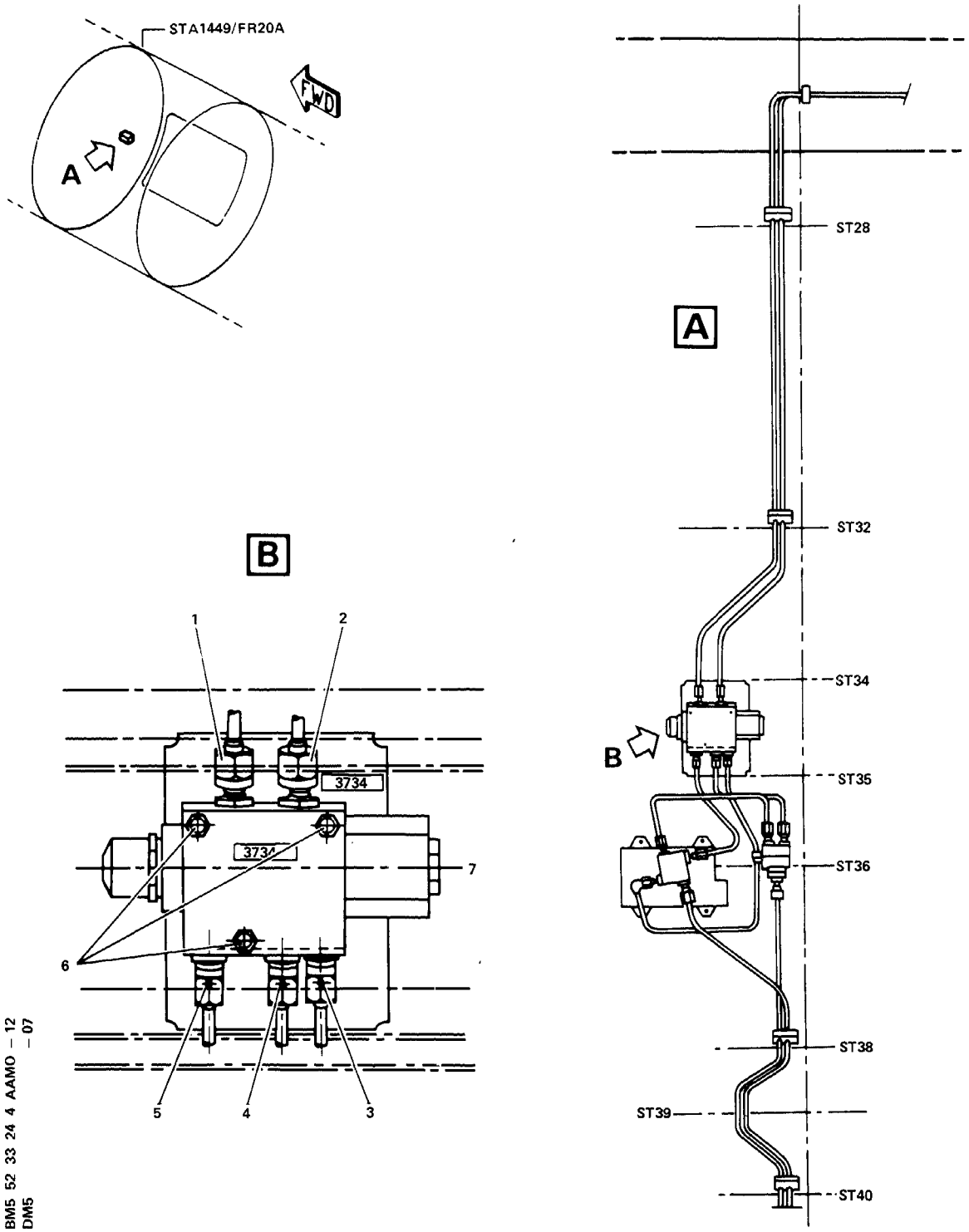
2. Procedure

A. Job Set-Up
(1)Open cargo compartment doors (Ref. 52-33-00, P. Block 1) and install cargo compartment door support struts.
(2)Display a warning notice on cargo compartment control valve selector to prohibit closing of doors.
(3)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
(4)Depressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(5)Depressurize Yellow hydraulic system (Ref. 29-10-00, P. Block 301).
(6)Remove furnishing panel.

R B. Removal of Sequence Valve 3734 (Ref. Fig. 401)
(1)Place a container under the sequence valve 3734.
(2)Remove unions (1), (2), (3), (4) and (5), discard O-rings.
(3)Remove screws (6) and remove sequence valve 3734 (7).

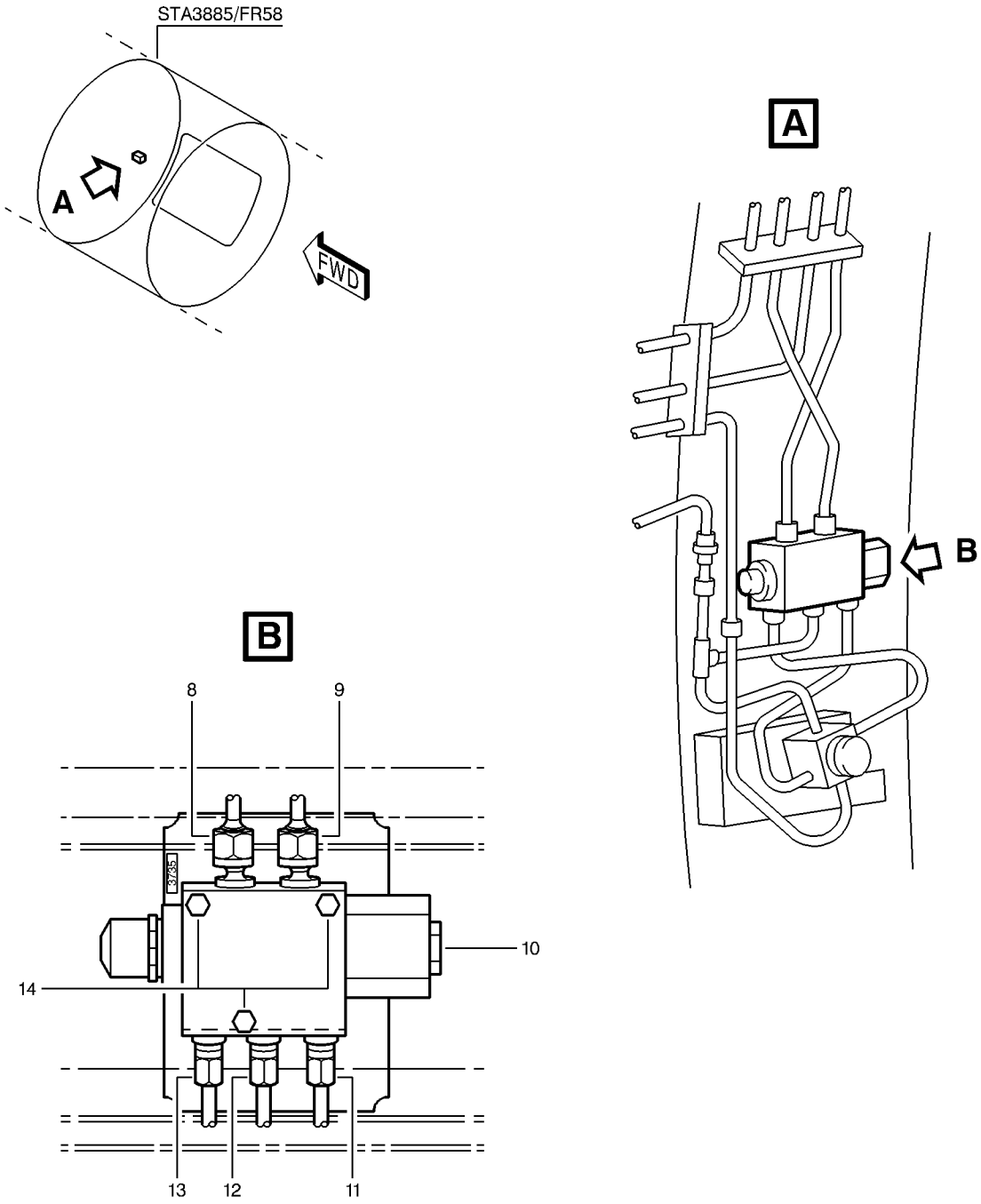
R C. Removal of Sequence Valve 3735 (Ref. Fig. 402)
(1)Place a container under the sequence valve 3735.
(2)Remove unions (8), (9), (11), (12) and (13), discard O-rings.
(3)Remove botls (14) and washers and remove sequence valve 3735 (10).

D. Installation of Sequence Valve 3734 (Ref. Fig. 401)



BM5 52 33 24 4 AAMO – 12 – 07
DM5

Sequence Valve 3734
Figure 401



BM5 52 33 24 4 AAN0 00

Sequence Valve 3735
Figure 402

(1)Install sequence valve (7) and screws (6).
(2)Install unions (1), (2), (3), (4) and (5) equipped with new O-rings.
(3)Remove container.

E. Installation of Sequence Valve 3735 (Ref. Fig. 402)
(1)Install sequence valve (10) and washers and bolts (14).
(2)Install unions (8), (9), (11), (12) and (13) equipped with new O-rings.
(3)Remove container.

F. Test
(1)Pressurize Yellow hydraulic reservoir (Ref. 29-14-00, P. Block 301).
(2)Bleed hydraulic system using door actuator (Ref. 52-33-00, P. Block 301).
(3)Remove support struts.
(4)Check for leaks at check valve and unions.
(5)If necessary, top up Yellow hydraulic reservoir (Ref. 12-12-29, P. Block 1).

G. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close landing gear doors (Ref. 32-12-11, P. Block 301).
(3)Install furnishing panel.
(4)Remove warning notices.

BULK CARGO COMPARTMENT DOOR - DESCRIPTION AND OPERATION

1. General

A. The BULK cargo compartment door is located on the lower RH side of the fuselage, between STA3620(FR67) and STA3726(FR69) and provides access to the BULK cargo compartment.

B. The door is of the plug type and opens inwards, hinging about its upper edge. When closed and locked, the outer surface of the door is flush with the fuselage skin. The door can be opened, closed and locked from either inside or outside the aircraft.

C. Bulk Cargo Compartment Door (Ref. Fig. 002)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
	BULK CARGO COMPARTMENT DOOR		162	813	52-34-00
	HINGE ARM		162	813	52-34-11
	HINGE ARM BRACKET		162	813	52-34-11
	DAMPER		162	813	52-34-11
	INSULATING MAT		162	813	52-34-00
	INTERNAL HANDLE		162	813	52-34-21
	SNAP HOOK ASSY		162	813	52-34-41
	SPRING UNIT		162	813	52-34-41
	LATCH ASSEMBLY		162	813	52-34-00
	LOWER EDGE MEMBER		162	813	52-34-00
	TORQUE SHAFT		162	813	52-34-21
	INNER SKIN		162	813	52-34-00
	CORNER SECTION		162	813	52-34-00
	BARREL LOCK		162	813	52-34-00
	BEAM		162	813	52-34-00
	FORMER		162	813	52-34-00
	SIDE EDGE MEMBER		162	813	52-34-11
	OUTER SKIN		162	813	52-34-00
	DOOR STOP FITTING		162	813	52-34-31
	SEAL RETAINER		162	813	52-34-00
	SEALING SECTION		162	813	52-34-11

2. Description

(Ref. Fig. 001)
(Ref. Fig. 002)

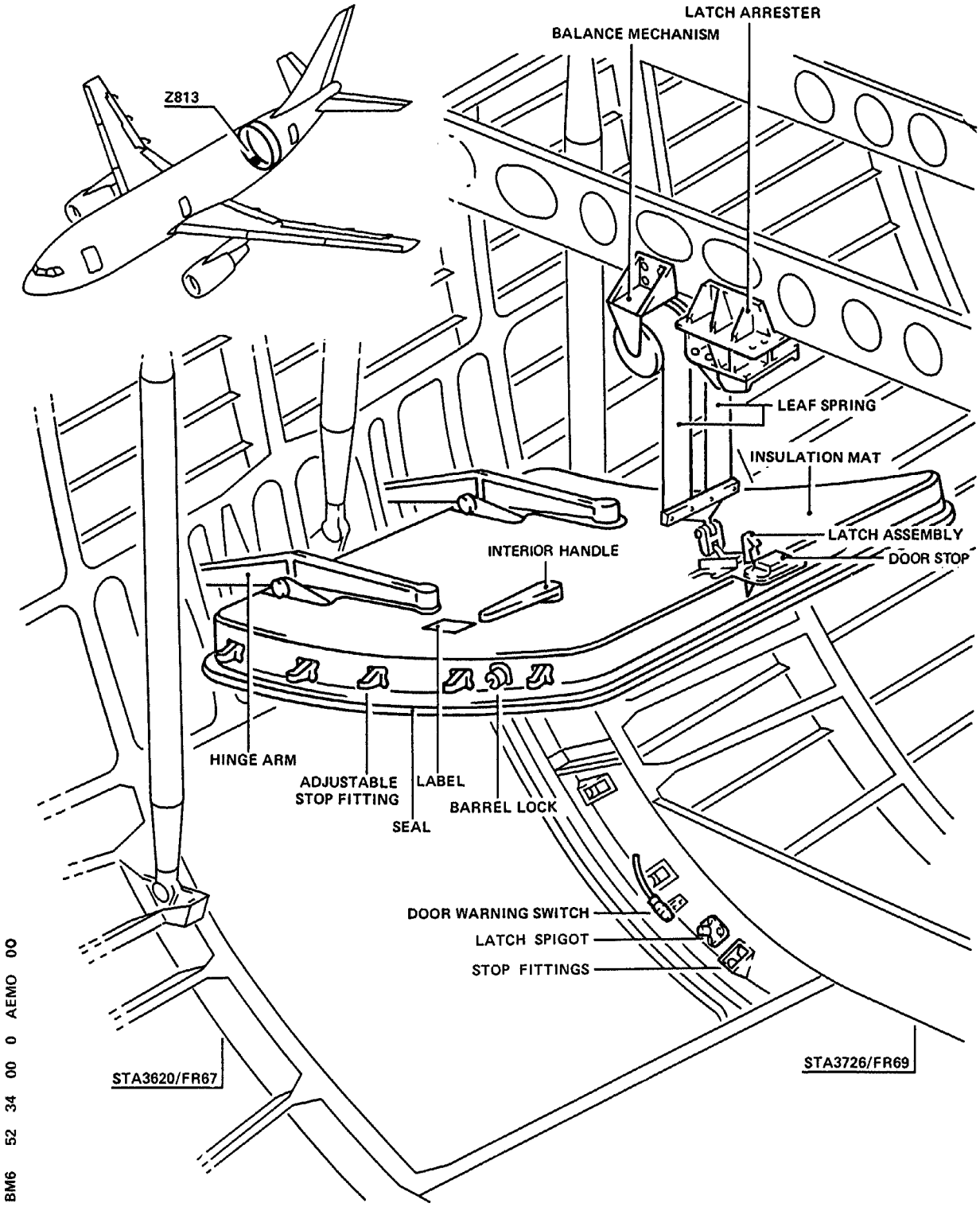
A. Structure

(1) The door structure comprises aluminum-alloy components riveted together. Major components are beams, edge members and an outer skin.

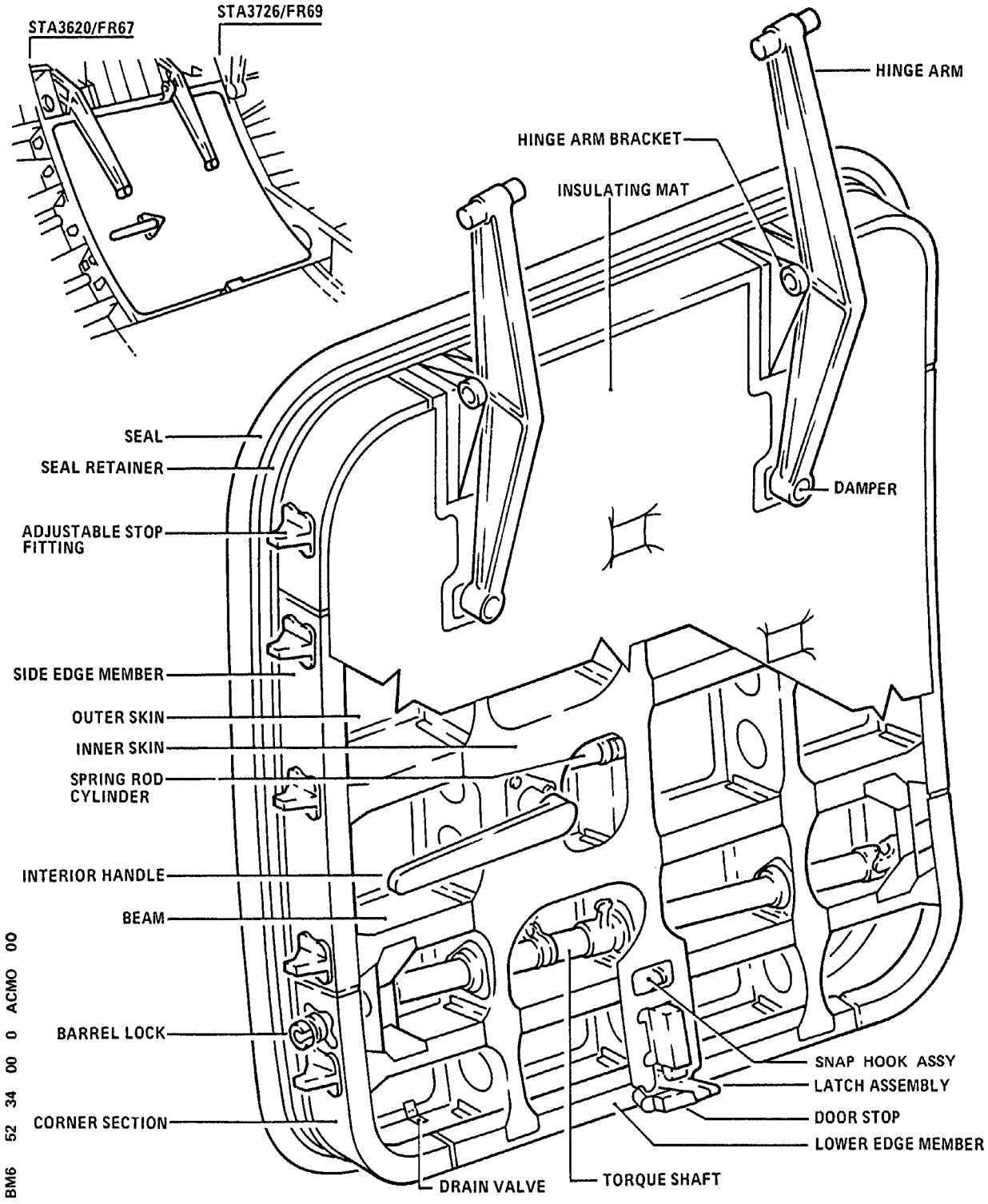
(2) Sealant is used during manufacture to ensure a pressure-tight seal at all joints and rivet holes.

B. Fittings

(1) Hinge arms attach the door to the fuselage structure.



BULK Cargo Compartment Door
Figure 001



BULK Cargo Compartment Door - General Arrangement
Figure 002

(2)Adjustable stop fittings, with mating stop fittings on the fuselage door frame, transfer pressurization loads to the aircraft structure.
(3)Barrel locks, protruding from the forward and aft edge members, form part of the door locking mechanism. When the door is in the closed position, the barrel locks locate on latch spigots attached to the fuselage door frame structure. The aft barrel lock trips the limit switch, attached to the aft fuselage door frame, giving a door locked indication in the flight compartment.
(4)Interconnected with the door locking mechanism is the latch assembly, which retains the door in the open position and is controlled by either the interior or exterior door handle. The latch assembly engages with a hook arrester, mounted inboard of the balance mechanism, on the ceiling of the BULK cargo compartment.

C. Balance Mechanism
(1)The balance mechanism is mounted in the ceiling of the BULK cargo compartment in line with STA4415(FR68), and is attached to the interior of the door via leaf springs.

D. Sealing
(1) The door seal is a rubber extrusion, with equally spaced pressurization holes, secured to the door by retainers and screws. When the door is closed, the seal is compressed by a sealing section on the fuselage frame and inflated by cabin air pressure to form a pressure-tight seal.

E. Drainage
(1) On the lower edge member, between seal and outer skin, a drain valve is installed. The drain valve is a flap assembly which covers a 10 mm (0.39 in.) dia. hole in the lower edge member and is protected by a retaining plate.
(2) At ground level, the drain valve is open to allow liquid to escape. During flight, the drain valve is closed by differential pressure.

F. Insulation
(1) Attached to the interior of the door is an insulation mat retained in position by Velcro tape. The mat is filled with a Skydrol-resistant material which is sealed inside a Hypalon cover.

G. Locking Mechanism
(1) The locking mechanism is mounted in the lower half of the door and is controlled by the door handles. When the exterior door handle is released and moved to the **OPEN** position, the interior door handle moves simultaneously to the **OPEN** position. With the exterior door handle secured in its recess, the interior door handle is free to be moved, independently, from the **LOCKED** to the **OPEN** position.
  (a) In the locked position the interior handle is horizontal. To open the door the handle must be rotated clockwise a quarter turn to the vertical position.
(2) When either door handle is moved, rotation of the torque shaft is achieved through an operating rod. The rotation of the torque shaft, with the door in the closed position, secures the barrel locks on to the latch spigots. With the door in the fully open position, and the door handles in the **CLOSED/LOCKED** condition, the latch assembly will engage the latch arrester, securing the door in the fully open position.
(3) With the door handles in the **CLOSED/LOCKED** position, a spring rod cylinder retains the complete locking mechanism in a positive locked condition

3. Operation

A. The exterior door handle is released by pressing the pushbutton mounted in the door handle.

B. The door is opened by moving either door handle to the **OPEN** position.

C. With movement of the door handles, an operating rod rotates the barrel locks, via the torque shaft. The barrel locks release the latch spigots mounted on the fuselage door frame, and the door is free to open inboard.

D. The door is opened partially, to clear the latch spigots, and the exterior door handle returned to the **CLOSED** and recessed position.

E. When the door is fully open, the latch assembly locates the latch arrester, mounted on the ceiling of the **BULK** cargo compartment. During opening, the weight of the door is compensated for by the balance mechanism.

F. The door will remain locked fully open with the door handles in the **CLOSED/LOCKED** position and the latch assembly engaged in the latch arrester.

G. Movement of the door handles to the **OPEN** position disengages the latch assembly and initiates a downward swing of the door, controlled by the balance mechanism.

H. After closure of the door the exterior door handle must be returned to the recessed position.

R CAUTION : PERCENTAGE (%) OF ALLOWABLE DAMAGE IS ALWAYS RELATED TO THE NOMINAL
R MATERIAL THICKNESS AS SPECIFIED IN SRM (STRUCTURAL REPAIR MANUAL).

NOTE : Should a defect be suspected during the following inspection/check, an approved nondestructive test must be carried out.
If a defect is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

1. Inspection/Check

A. Reasons for the Job
(1)Inspection of door skin and internal structure
(2)Inspection/check of door seal

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.30 m (7.5 ft.)
(2)Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-34-11, P. Block 501	BULK Cargo Compartment Door
- 52-34-12, P. Block 401	Suspension
- 52-34-12, P. Block 601	Suspension
- 52-34-18, P. Block 401	Seal
- 52-34-18, P. Block 801	Seal
- 52-34-21, P. Block 601	Locking Mechanism
- 52-34-31, P. Block 601	Fittings
- 52-34-41, P. Block 601	Balance Mechanism
	Nondestructive Testing Manual (NTM)
	Structural Repair Manual (SRM)

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)Open door and return external handle to CLOSED/LOCKED position.
(c)Remove door insulation mat.
R (2)Damage Criteria
(a)The following areas have specific damage criteria:
1 Longerons
2 Door frame
3 Door suspension
R 4 Machined parts.
R 5 Outer skin
R 6 Inner skin
R 7 For the damage limits for steps 1 thru to 7 refer to the
R SRM 52-30-00, P. Block 101.
(b)Should stated limits be exceeded, a structural repair must be carried out, or component must be replaced.
1 For the removal of scratches, marks and dents refer to 51-73-10, P. Block 801.
2 For the removal of corrosion refer to 51-74-10, P. Block 801.
3 For the repair of paint coatings refer to 51-75-10, P. Block 801.
(3)Inspection/Check
(a)Inspect all door structural components and areas for damage, cracks, loose or missing rivets, paint damage and corrosion, particularly in the following areas:
1 External skin
2 Internal skin, structure and frame
3 Suspension
(b)Inspect all door components for serviceability.
1 For inspection/check of suspension refer to 52-34-12, P. Block 601.
2 For inspection/check of locking mechanism refer to 52-34-21, P. Block 601.
3 For inspection/check of fittings refer to 52-34-31, P. Block 601.
4 For inspection/check of balance mechanism refer to 52-34-41, P. Block 601.

(c)Inspect door seal for cuts, chafe marks, wear and security of attachment.
1 For removal/installation of seal refer to 52-34-18, P. Block 401.
2 For repair of seal refer to 52-34-18, P. Block 801.
(d)Check drain valve for blockage, missing parts, damage and security of attachment.
(e)Check, by moving door fore and aft, that play does not exist between hinge arms and support structure.
1 Should play exist, shimwashers must be installed, as required, between hinge arms and support structure (Ref. 52-34-12, P. Block 401).
(f)Check, by moving door to closed and back to open position, that hinge pins do not rotate. If hinge pins rotate, hinge pins must be removed (Ref. 52-34-12, P. Block 401).
(g)Check sealant for good condition and serviceability. Renew sealant if necessary (Ref. 51-76-10, P. Block 801).

(4)Test
(a)Open and close door several times and make certain that door operates smoothly. For adjustment/test refer to 52-34-11, P. Block 501.

(5)Close-Up
(a)Open door.
(b)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(c)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition on all internal surfaces and structure of BULK cargo compartment door and apply if necessary (Ref. 51-75-10, P. Block 801).
(d)Install insulation mat.
(e)Close and lock BULK cargo compartment door.
(f)Remove access platform.

R
R

1. Auxiliary Operation of the Bulk Cargo Door in case of inoperative or damaged Balance Mechanism

R REF: MMEL 1-52, Item 5A Bulk Cargo Door Balance Mechanism

A. Reason for the Job
Bulk Cargo Door Balance Mechanism inoperative or damaged.

B. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B.	Warning Placard

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(2)Opening of the Bulk Cargo Door
(a)Unlatch the Bulk Cargo Door handle and lift the Bulk Cargo Door a small amount with hand force.
(b)Then latch the handle outside of the fuselage contour again, to activate the arresting hook.
(c)Lift the Bulk Cargo Door with hand force until the hook has engaged into the arrester.
(3)Installation of Warning Placards

(Ref. Fig. 901)
(a)Put a warning placard close to the outside Bulk Cargo Door Handle.
(b)Put a warning placard close to the inside Bulk Cargo Door Handle.
(4)Closing of the Bulk Cargo Door
(a)Hold the Bulk Cargo Door with hand force in open position.
(b)Unlatch the Bulk Cargo Door handle to release the hook from the arrester.
(c)Support the Bulk Cargo Door and let it down slowly.
(d)Close and lock the Bulk Cargo Door.
(5)Close-Up
(a)Remove access platform.

WARNING

AUXILIARY OPERATION IN CASE OF BALANCE MECHANISM INOPERATIVE.

OPENING THE BULK CARGO DOOR

UNLATCH THE BULK CARGO DOOR, LIFT A SMALL AMOUNT WITH HAND FORCE, THEN LATCH THE HANDLE OUTSIDE THE FUSELAGE CONTOUR AGAIN, TO ACTIVATE THE ARRESTING HOOK.
LIFT THE BULK CARGO DOOR WITH HAND FORCE UNTIL THE HOOK HAS ENGAGED INTO THE ARRESTER.

CLOSING THE BULK CARGO DOOR

HOLD THE BULK CARGO DOOR WITH HAND FORCE IN OPEN POSITION, THEN UNLATCH THE BULK CARGO DOOR HANDLE TO RELEASE THE HOOK FROM THE ARRESTER. SUPPORT THE BULK CARGO DOOR AND LET IT DOWN SLOWLY.
CLOSE AND LOCK THE BULK CARGO DOOR.

BM6 52 34 00 9 AAM0 00

Example of Warning Placard
Figure 901

BULK CARGO COMPARTMENT DOOR - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B. 98A52307598000	Extractor - Hinge Pins, BULK Cargo Compartment Door
C.	Tabwashers
D. Material No. 04-004	Common Greases (Ref. 20-31-00)
E. Material No. 05-002	Special Materials (Ref. 20-31-00)
F. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 20-28-11, P. Block 1	Electrical Bonding
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-34-11, P. Block 501	BULK Cargo Compartment Door
- 52-71-11, P. Block 501	Door Warning Switches

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

**ON A/C ALL

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Unlock and open door, and return exterior door handle to CLOSED and recessed position, after barrel locks have cleared lock spigots.
(3)Remove sidewall panel above door.
(4)Remove heat insulation from around hinge area on fuselage structure.

B. Removal (Ref. Fig. 401)
(1)Remove fishplate (18) from spring rod cylinder (14).
(a)Support door in half-open position.
(b)Remove cotter pin (17), nut (16) and washers (15).
CAUTION : BALANCE MECHANISM IS UNDER TENSION.
(c)Remove bolt (13) and guide leaf spring (1) back into spring drum of balance mechanism.
(2)Remove support and lower door until resting on fittings.
(3)Remove nuts (8), washers (7), bolts (4) and disconnect bonding straps (3) from fuselage structure.

(4)Remove door.
CAUTION : DOOR WEIGHS 32 kg (70.5 lb.).
(a)Release tabwashers (11) and remove bolts (12).
(b)Remove hinge pins (10) using extractor tool P/N 98A52307598000.
(c)Remove washers (5). Record location of washers (5) for subsequent installation.
(d)Move door clear of door frame and lower onto a suitable support.

C. Preparation for Installation
(1)Unless otherwise stated, clean all washers, nuts, bolts, bushes, hinge pins and thinly coat with grease (Mat. No. 04-004). (Ref. Fig. 401)

D. Installation
(1)Install door.
CAUTION : DOOR WEIGHS 32 kg (70.5 lb.).
(a)Position door in fuselage door frame with hinge arms (6) correctly engaged in hinge fittings (9).
(b)Position washers (5) as previously recorded between hinge arms (6) and hinge fittings (9).
(c)Insert hinge pins (10) using extractor tool P/N 98A52307598000.
(d)Install bolts (12) and safety with tabwashers (11).
(2)Connect bonding straps (3).
(a)Position bonding straps (3) on fuselage structure and install bolts (4), washers (7) and nuts (8). For electrical bonding refer to 20-28-11, P. Block 1.
CAUTION : BALANCE MECHANISM IS UNDER TENSION.
(3)Connect leaf spring (1) to BULK cargo door.
(a)Support door in half-open position.
(b)Pull leaf spring (1) out of spring drum, position fishplate (18) and connect spring rod cylinder (14) with bolt (13).
(c)Install washer (15), nut (16) and safety with cotter pin (17).
(4)Remove support and lower door until resting on fittings.
(5)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

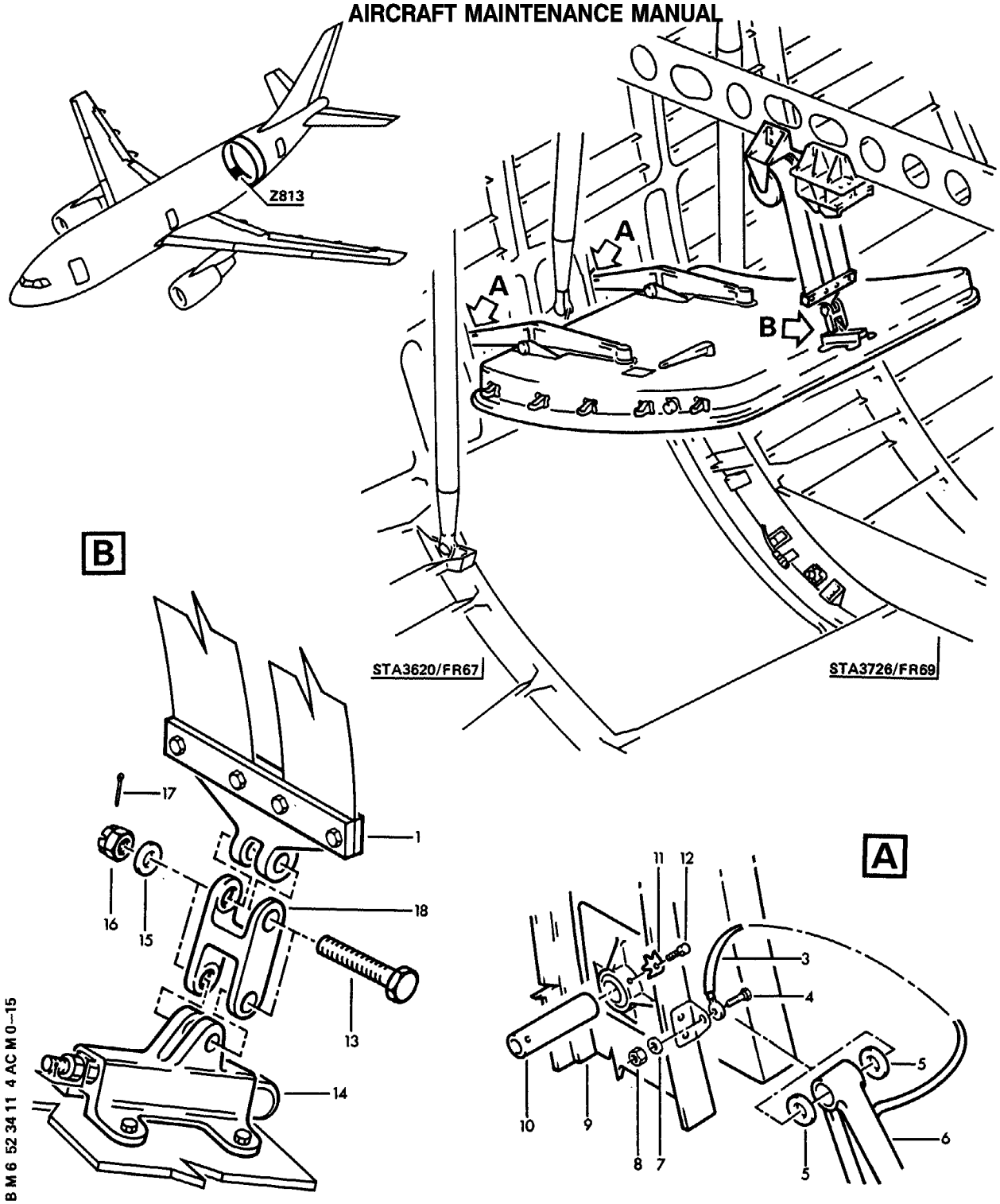
E. Test
(1)Carry out adjustment/test of BULK cargo compartment door (Ref. 52-34-11, P. Block 501).
(2)Carry out operational test of door warning switch for BULK cargo compartment door (Ref. 52-71-11, P. Block 501).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

(3)Carry out operational test of residual pressure warning system for BULK cargo compartment door (Ref. 52-73-00, P. Block 501).

**ON A/C ALL



Hinge Pins and Balance Mechanism Connection
Figure 401

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition on fuselage internal structure above door and apply if necessary (Ref. 51-75-10, P. Block 801).
(3)Install heat insulation.
(4)Install sidewall panel above door.
(5)Close and lock BULK cargo compartment door.
(6)Remove access platform.

1. Reasons for the Job

A. Adjustment of door and fittings

B. Adjustment of door locking mechanism

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B. 98A52307622000	Gage-Measuring, Bulk Cargo Door Locking Mechanism
C.	Corrosion-Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
D.	Shimwashers
E.	Spring Balance, up to 20 daN (50 lbf.)
F.	Washers
G. Material No. 04-004	Common Greases (Ref. 20-31-00)
H. Material No. 05-002	Special Materials (Ref. 20-31-00)
J. Material No. 05-027	Special Materials (Ref. 20-31-00)
K. Material No. 09-013	Sealants (Ref. 20-31-00)
L. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)

Referenced Procedures

- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-34-11, P. Block 401	BULK Cargo Compartment Door
- 52-34-21, P. Block 401	Locking Mechanism
- 52-71-11, P. Block 501	Door Warning Switches

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

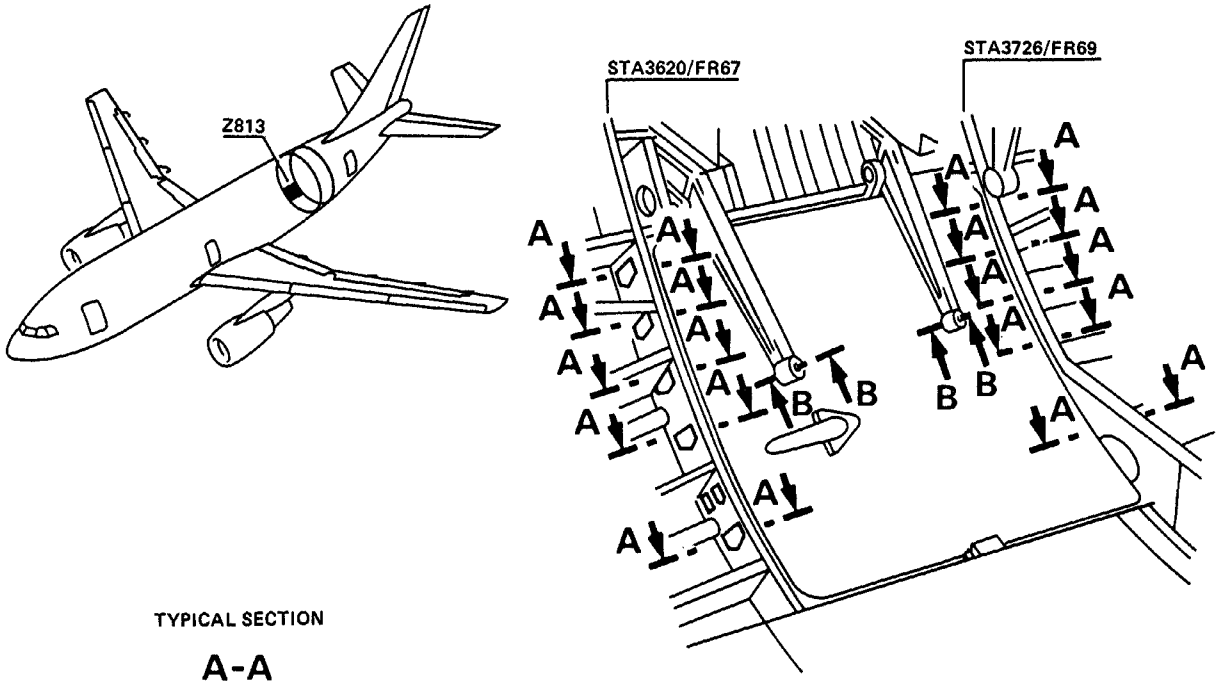
R **ON A/C ALL

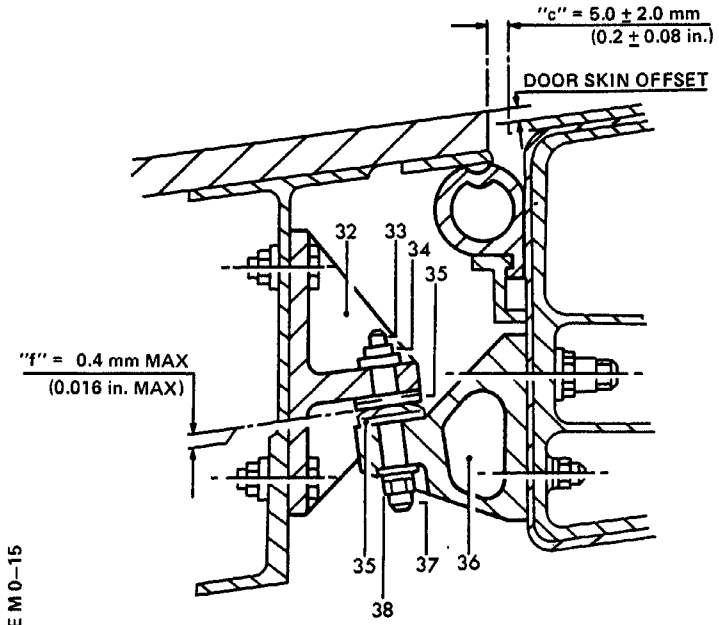
3. Procedure

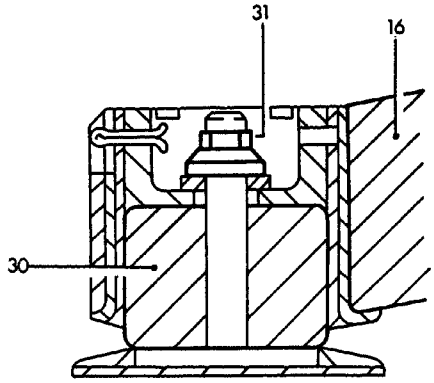
A. Job Set-Up
(1)Position access platform.
(2)Open BULK cargo compartment door and return exterior control handle to CLOSED/LOCKED position.
(3)Remove door insulation mat.
(4)Remove sidewall panels, as required.

B. Adjustment of Door and Fittings
(1)Adjustment of Stop Fittings (Ref. Fig. 501, 502)
(a)Open door.
(b)Release nuts (12) securing latch spigot (8).
(c)Remove nuts (34, 38), screws (33, 37) and shimwashers (35) from all stop fittings (32, 36).
(d)Install screws (33, 37) and nuts (34, 38) in upper and lower stop fittings (32, 36).
(e)Close door.
(f)Check that upper and lower stop fittings (32, 36) are in contact, if stop fittings (32, 36) are not in contact, proceed as follows:
1 Open door.
2 Remove nuts (34, 38) and screws (33, 37).
3 Install shimwashers (35) under heads of screws (33, 37) as required. Make certain that thickness of shimwashers (35) under head of screws (33, 37) is equal.
4 Apply grease (Mat. No. 04-004) to plain shank of stop bolts (33, 37).
5 Install screws (33, 37) and safety with nuts (34, 38).
6 Close door.
(g)Check that gap 'f', between remaining stop fittings (32, 36), is not more than 0.4 mm (0.016 in.).
(h)Should stated limit be exceeded, proceed as follows:
1 Open door.
2 Remove nuts (34, 38) and screws (33, 37).
3 Install or remove shimwashers (35) as required. Make certain that thickness of shimwashers (35) under head of screws (33, 37) is equal.
4 Install screws (33, 37) and safety with nuts (34, 38).
5 Close door.
6 Repeat steps (f) thru (h), if necessary.
(j)Adjust latch spigot (8) (Ref. Para. 3.B.(2)).

(2)Adjustment of Latch Spigot (Ref. Fig. 502)
(a)Make certain that stop fittings are adjusted as described in Para. 3.B. (1).
(b)Check that gap 'g', between roller (11) of latch spigot (8) and barrel lock (9), is between 0.1 and 0.4 mm (0.004 and 0.015 in.). Make certain that barrel lock (9) is fully rotated.







NOTE: DOOR SKIN OFFSET LIMITS

AT FRAME 67

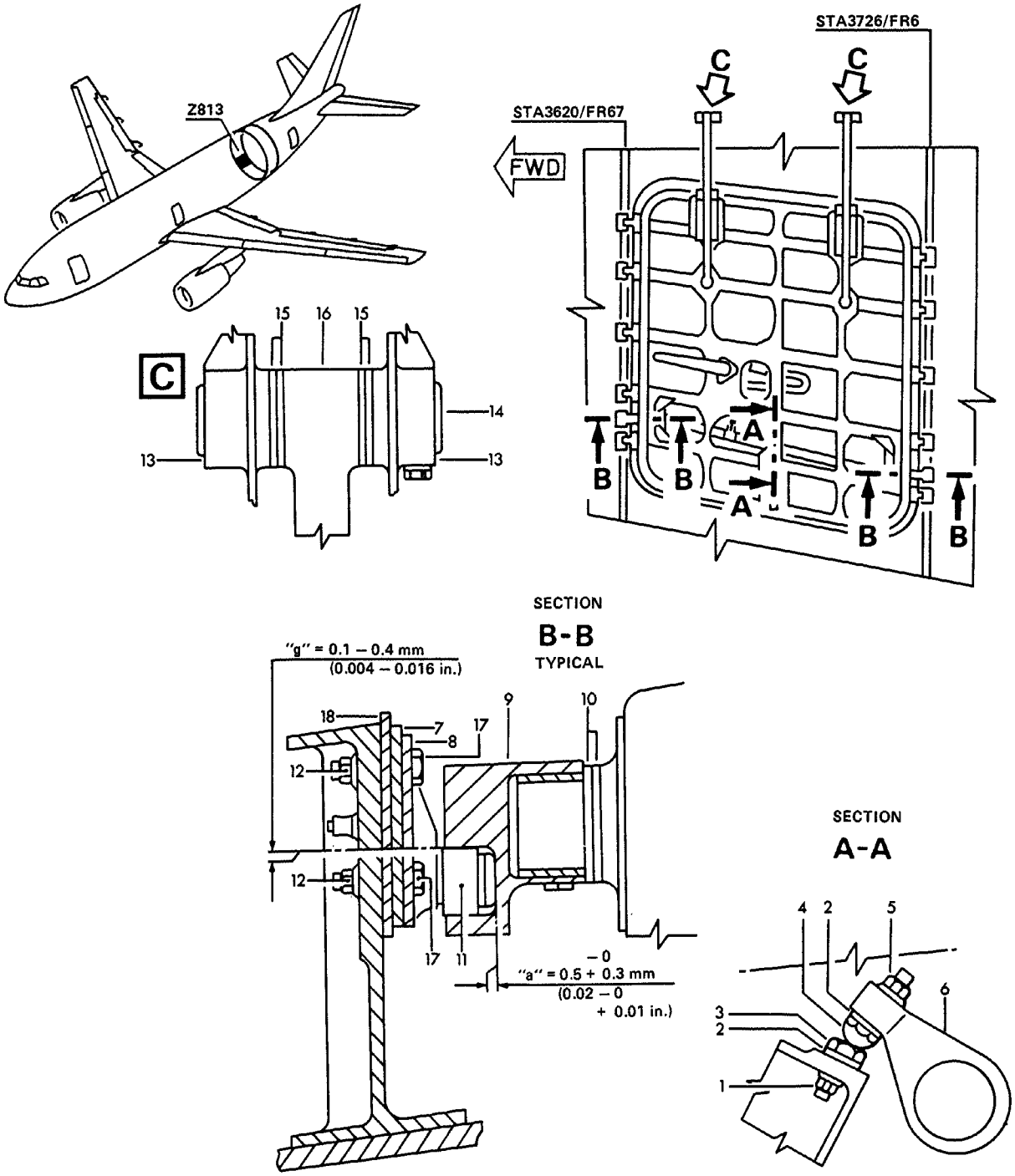
$$"d" = \frac{0.0\ ^{+1.5}_{-1.5}\ \text{mm}}{(0.0\ ^{+0.06}_{-0.06}\ \text{in.})}$$

AT FRAME 69

$$"e" = \frac{0.0\ ^{+1.5}_{-1.5}\ \text{mm}}{(0.0\ ^{+0.06}_{-0.06}\ \text{in.})}$$

B M 6 52 34 11 5 AE M 0–15

BULK Cargo Compartment Door
Figure 501



BM6 52 34 11 5 AA M 0–15

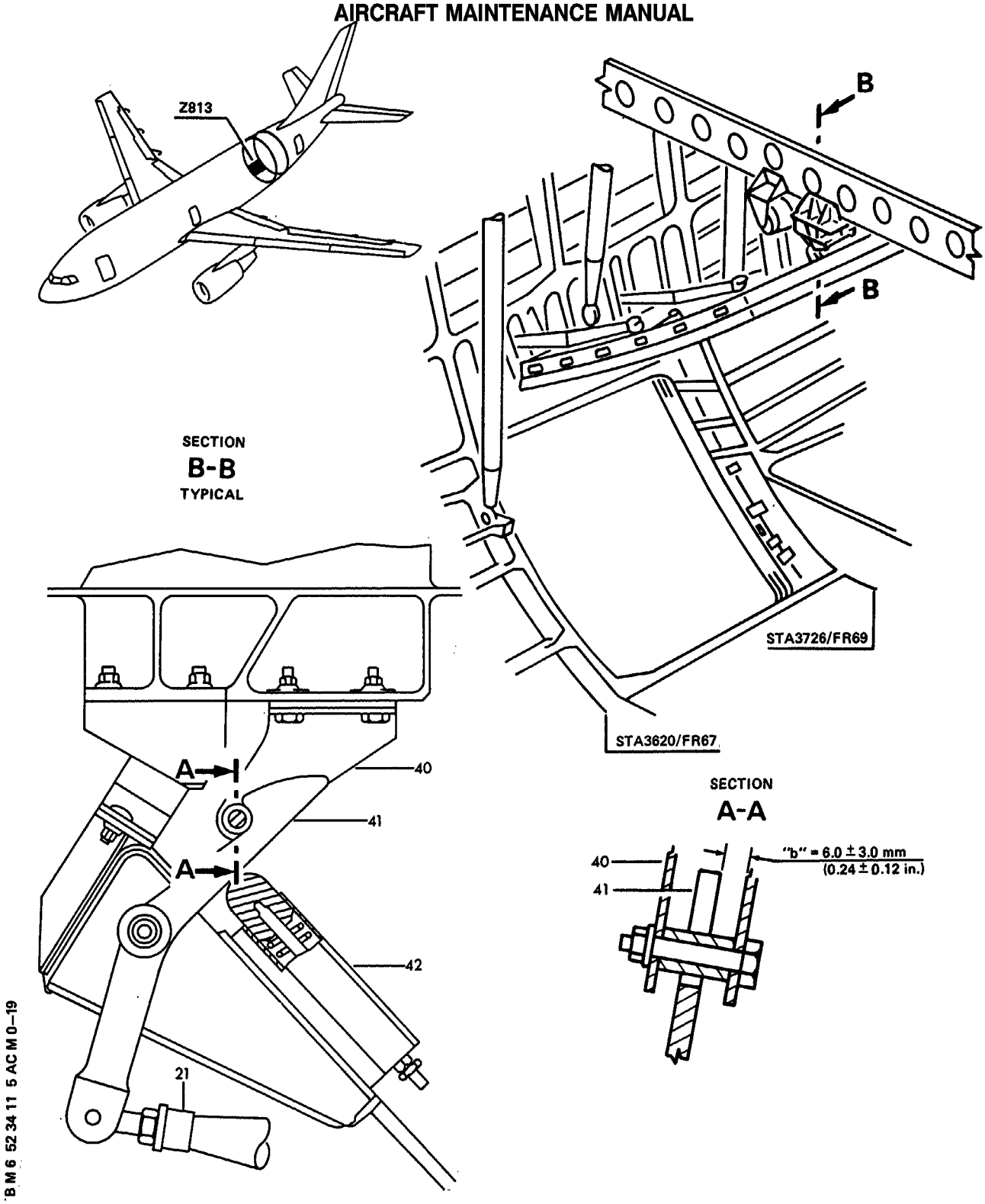
BULK Cargo Compartment Door
Figure 502

(c)Should stated limit be exceeded, adjust latch spigot (8) as follows:
1 Open door.
2 Record location of serrated plate (7) and latch spigot (8) for subsequent installation.
3 Remove nuts (12), bolts (17), latch spigot (8) and serrated plate (7).
4 Clean components with cleaning agent (Mat. No. 11-004).
5 Apply grease (Mat. No. 04-004) to all contact surfaces between latch spigot (8) and serrated plates (7, 18).
6 Apply sealant (Mat. No. 09-013) to plain shank of bolts (17).
7 Position serrated plate (7) and latch spigot (8) as previously recorded.
8 Install bolts (17).
9 Install nuts (12) but do not tighten.
10 Adjust latch spigot (8) on serrated plates (7, 18) as required.
11 Tighten nuts (12).
12 Close door.
13 Adjust locking mechanism, if necessary (Ref. Para. 3.C.).

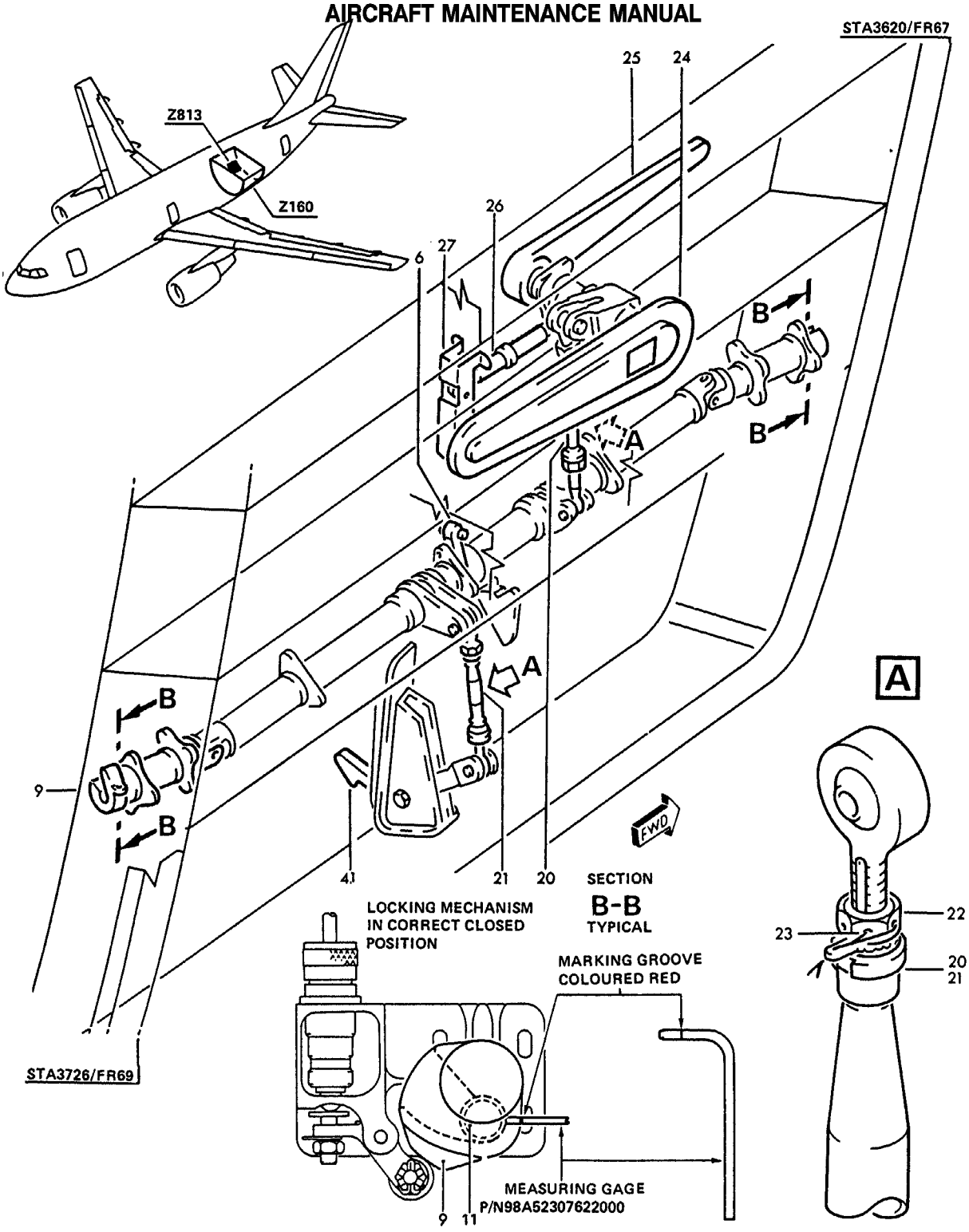
(3)Adjustment of Skin Offset and Gaps (Ref. Fig. 501)
(a)Make certain that door is adjusted as described in Para. 3.B (1) and (2).
(b)Check that gap 'c', between edge of door outer skin and fuselage skin, is 5.0 ± 2.0 mm (0.2 ± 0.08 in.).
1 Should stated limits be exceeded, hinge arms (16) must be adjusted (Ref. Para. 3.B.(4))
(c)Check door skin offset.
1 Check that skin offset 'd', between fuselage skin and forward edge of door skin at STA3620(FR67), is 0 ± 1.5 mm (0 ± 0.06 in.).
2 Check that skin offset 'e', between aft edge of door skin and fuselage skin at STA3726(FR69), is 0 ± 1.5 mm (0 ± 0.06 in.).
3 Should stated limits be exceeded, adjust the following:
1 Stop fittings (Ref. Para. 3.B.(1)).
2 Latch spigots (Ref. Para. 3.B.(2)).
4 If skin offset 'd' and 'e' cannot be obtained at upper forward and aft edges of door, hinge arm dampers (30) may be adjusted by turning nuts (31).
(d)Adjust locking mechanism, if necessary (Ref. Para. 3.C.).

(4)Adjustment of Hinge Arms (Ref. Fig. 502)
(a)Make certain that door is adjusted as described in Para. 3.B.(1) thru (3).
(b)Check, by moving door fore and aft, that play does not exist between door hinge arms (16) and door support structure (13). Should play exist, proceed as follows:
1 Close door and remove hinge pin (14) (Ref. 52-34-11, P. Block 401).
2 Install shimwashers (15), as required, between hinge arms (16) and door support structure (13).
3 Install hinge pin (14) (Ref. 52-34-11, P. Block 401).
4 Adjust locking mechanism, if necessary (Ref. Para. 3.C.).

C. Adjustment of Locking Mechanism
(Ref. Fig. 502, 503, 504)
(1)Adjustment of exterior handle (24).
(a)Close and lock door.
(b)Make certain that roller (11) of latch spigot (8) is correctly engaged in barrel lock (9).
1 Insert measuring gage P/N 98A52307622000 in inspection holes of barrel locks (9).
2 Check that red ring of measuring gage P/N 98A52307622000 is visible (Ref. Fig. 504).
If red ring is not visible, adjust pushrod (20) as required, refer to Para. 3.C.(6).
3 Remove measuring gage P/N 98A52307622000.
4 Repeat step (b), if necessary.
(c)Release exterior handle (24).
(d)Make certain that exterior handle (24) is in line with exterior handle recess. If exterior handle (24) is not in line with recess, adjust pushrod (20), refer to Para. 3.C.(6).
(e)Repeat step (1), if necessary.
(f)Make certain that after pressing button in handle, handle (24) pops out.
1 If exterior handle does not pop out completely, replace rivets on bracket (27) with bolts. Reduce load of spring unit (26) by adding shims of 2.0 mm to 5.0 mm (0,08 to 0,20 in.) thickness between door structure and bracket (27) until exterior handle pops out completely (Ref. 52-34-21, P. Block 401).
(2)Adjustment of stop lever (6).
(a)Make certain that exterior handle (24) is correctly adjusted (Ref. Para. 3.C.(1)).
(b)Unlock door and make certain that stop lever screw (4) just contacts stop screw (3).



Latch Assembly
Figure 503



Locking Mechanism
Figure 504

(c)Make certain that roller (11) of latch spigot (8) does not touch barrel lock (9). If roller (11) of latch spigot (8) does touch barrel lock (9), adjust as follows:

1 Lock door.
2 Remove nuts (1, 5), stop screws (3, 4) and washers (2).
3 Remove or install washers (2) as required. Make certain that same thickness of washers (2) are installed under head of stop screws (3, 4).
4 Install stop screws (3, 4) and nuts (1, 5).
5 Repeat step (2), if necessary.

(3)Adjustment of gap 'a'.

(a)Make certain that components listed in Para. 3.B.(1) and 3.B.(2) are correctly adjusted.
(b)Make certain that door is closed and locked.
(c)Check that gap 'a', between end of roller (11) of latch spigot (8) and end of barrel lock (9), is between 0.5 and 0.8 mm (0.02 and 0.03 in.). Should stated limits be exceeded, proceed as follows:

1 Open door.
2 Remove barrel lock (9) as required (Ref. 52-34-21, P. Block 401).
3 Remove or install washers (10), as required.
4 Install barrel lock (9) (Ref. 52-34-21, P. Block 401).
5 Close door.
6 Repeat step (3).

(4)Adjustment of hook (41).

(a)Make certain that components listed in Para. 3.C.(1) thru 3.C.(3) are correctly adjusted.
(b)Open door and make certain that hook (41) of latch assembly engages latch arrestor (40).
(c)Check that hook (41) of latch assembly releases when either handle is moved to OPEN position. If hook (41) does not release/engage latch arrestor (40), adjust pushrod (21), refer to Para. 3.C.(6).

NOTE : Make certain that locknuts of spring rod cylinder (42) are safetied with tabwasher and lockwire.

(d)Repeat step (4), if necessary.

(5)Adjustment of gap 'b'.
(a)Make certain that components listed in Para. 3.C.(1) thru 3.C.(4) are correctly adjusted.
(b)Make certain that door is opened and hook (41) is engaged.
(c)Check that gap 'b', between hook (41) of latch assembly and structure of latch arrestor (40), is 6.0 ± 3.0 mm (0.24 ± 0.12 in.). Should stated limits be exceeded, latch arrestor (40) must be repositioned.
(d)Repeat step (5), if necessary.
(6)Adjustment of pushrods (20, 21).
(a)Cut and remove lockwire (23) from locknuts (22) at both ends of pushrods (20, 21).
(b)Release locknuts (22) and adjust pushrods (20, 21) as required.
(c)Tighten locknuts (22) and safety with lockwire (23).
(7)Check force required to operate exterior and interior handles (24, 25).
(a)Make certain that components listed in Para. 3.B.(1) thru 3.B.(4) and Para. 3.C.(1) thru 3.C.(6) are correctly adjusted.
(b)Close and lock door.
(c)Release exterior handle (24).
(d)Connect spring balance to exterior handle (24).
(e)Using spring balance, pull exterior handle (24) to open and back to closed position. Operating force should not exceed 15 daN (33.7 lbf.).
1 Should stated limit be exceeded, latch spigots must be adjusted (Ref. Para. 3.B.(2)).
(f)Remove spring balance.
(g)Close and lock door.
(h)Connect spring balance to interior handle (25).
(j)Using spring balance pull interior handle (25) to open and back to closed position. Operating force should not exceed 15 daN (33.7 lbf.).
1 Should stated limit be exceeded, latch spigots must be adjusted (Ref. Para. 3.B.(2)).
(k)Remove spring balance.
(l)Close and lock door.

D. Test
(1)Open and close door several times and make certain locking mechanism functions correctly.
(2)Carry out adjustment/test of door warning switch (Ref. 52-71-11, P. Block 501).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

(3)Carry out operational test of residual pressure warning system for BULK cargo compartment door (Ref. 52-73-00, P. Block 501).

**ON A/C ALL

E. Close-Up
(1)Open door.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Apply corrosion-preventive paste (Mat. No. 05-002) to all thread ends.
(4)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition and apply if necessary (Ref. 51-75-10, P. Block 801).
(5)Install insulation mat.
(6)Install sidewall panels, if removed.
(7)Close and lock BULK cargo compartment door.
(8)Remove access platform.

1. Equipment and Materials

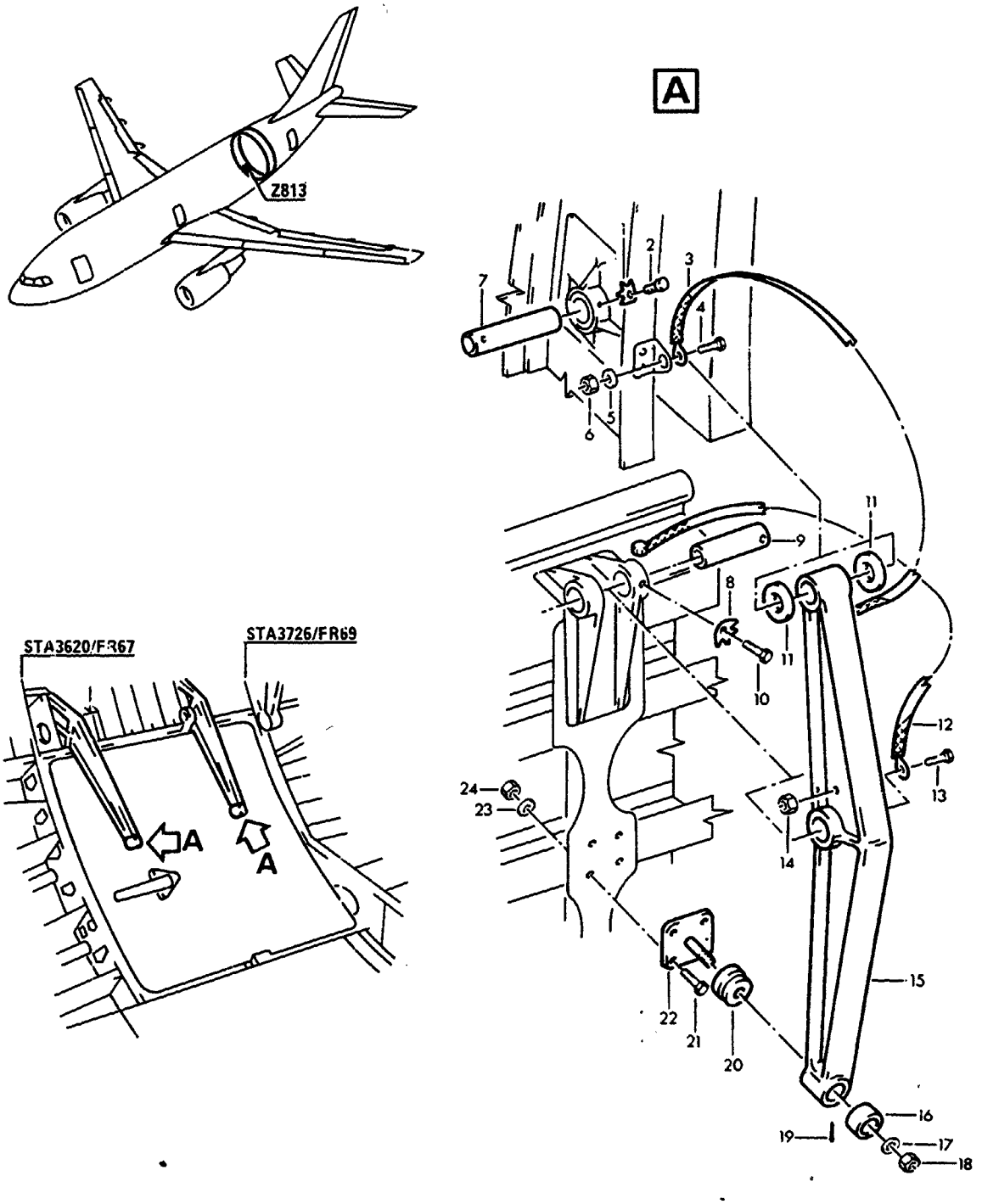
ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B. 98A52307598000	Extractor - Hinge Pins, BULK Cargo Compartment Door
C.	Tabwashers
D.	Cotter Pins
E. Material No. 04-004	Common Greases (Ref. 20-31-00)
F. Material No. 05-002	Special Materials (Ref. 20-31-00)
G. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 20-28-11, P. Block 1	Electrical Bonding
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-11, P. Block 501	BULK Cargo Compartment Door

2. Procedure

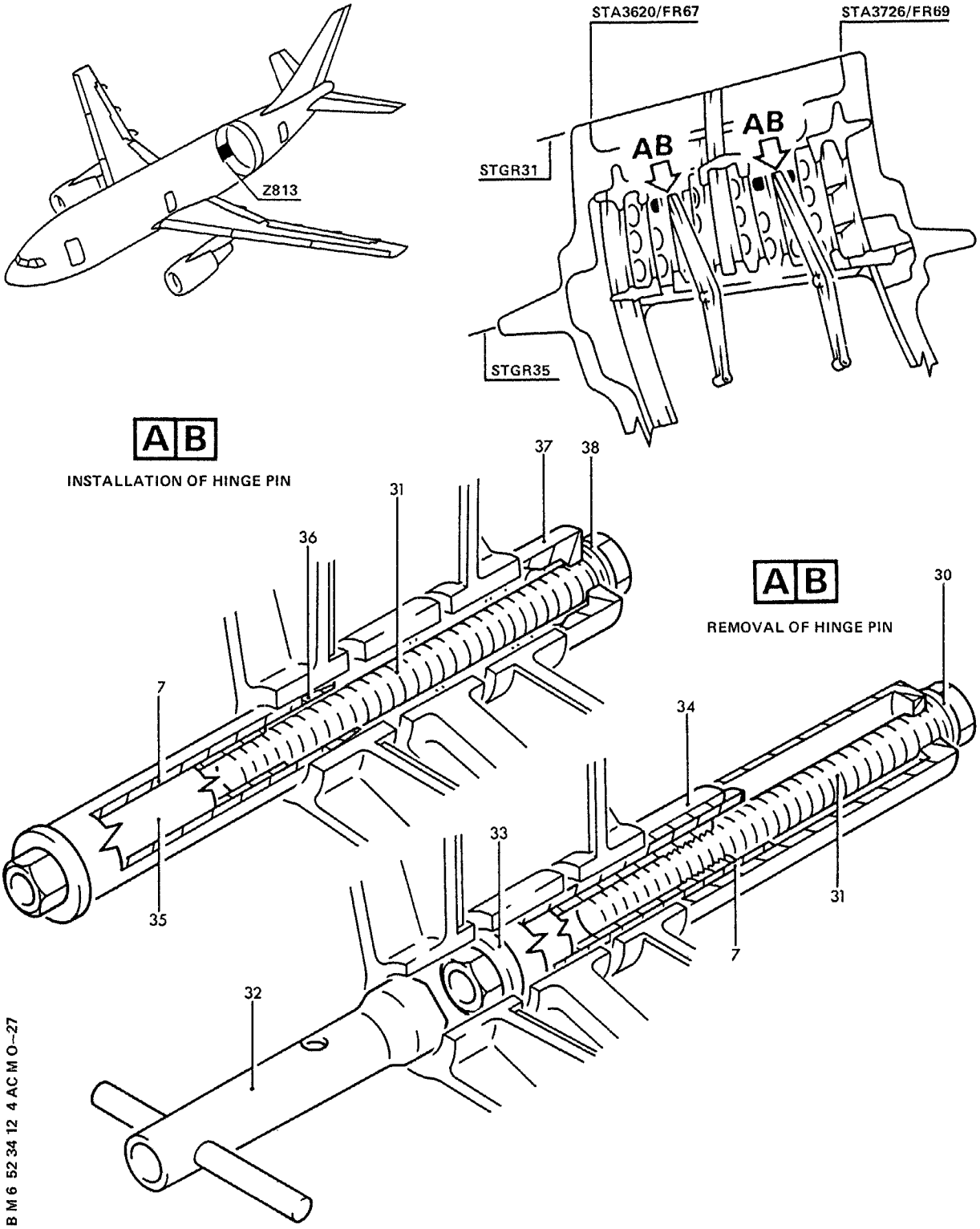
A. Job Set-Up
(1)Position access platform.
(2)Open AFT cargo compartment door and secure with safety lock (Ref. 52-30-00, P. Block 301).
(3)Make certain that BULK cargo compartment door is locked.
(4)Remove sidewall panel above the door.
(5)Remove heat insulation from around hinge area on fuselage structure.

B. Removal (Ref. Fig. 401, 402)
(1)Disconnect bonding straps (3, 12).
(a)Remove nuts (6), washers (5), bolts (4) and disconnect bonding straps (3) from fuselage structure.
(b)Remove nuts (14), bolts (13) and disconnect bonding straps (12) from hinge arms (15).
(2)Remove hinge arms (15).
(a)Remove nuts (18), washers (17), cotter pins (19) and nuts (16).
(b)Release tabwashers (1) and remove bolts (2).
(c)Remove hinge pins (7) and washers (11) using removal sleeves (33, 34), washer (30), bolt (31) and extension spanner (32) of extractor tool P/N 98A52307598000. Record location for subsequent installation.
(d)Release tabwashers (8) and remove bolts (10).
(e)Remove hinge pins (9).
(f)Remove hinge arms (15), washers (11) and rubber damping plugs (20). Record location of hinge arms (15) for subsequent installation.

C. Preparation for Installation (Ref. Fig. 401)
(1)Unless otherwise stated, clean all washers, nuts, bolts, bushes, hinge pins and thinly coat with grease (Mat. No. 04-004).
(2)Check damper spigots (22) for good condition. If worn, proceed as follows:
(a)Remove insulation from around attachment area.
(b)Remove nuts (24), washers (23), bolts (21) and damper spigots (22).
(c)Position new damper spigots (22) and install bolts (21), washers (23) and nuts (24).
(d)Install insulation mat.
(3)Check rubber damping plugs (20) for good condition and renew if necessary.



Hinge Arms
Figure 401



Extraction/Insertion Tool
Figure 402

D. Installation (Ref. Fig. 401, 402)
(1)Install hinge arms (15).
(a)Position rubber damping plugs (20), hinge arms (15) as previously recorded.
(b)Install hinge pins (9), tabwashers (8) and bolts (10).
(c)Safety bolts (10) with tabwashers (8).
(d)Install washers (11).
(e)Apply grease (Mat. No. 04-004) to hinge pins (7) and insert hinge pins using installation sleeves (35, 37), adapter (36), washer (38) and bolt (31) of extractor tool P/N 98A52307598000. Make certain that hinge pins can be installed easily.
(f)Install tabwashers (1) and bolts (2).
(g)Safety bolts (2) with tabwashers (1).
(h)Install nuts (16) and adjust door in closed position (Ref. 52-34-11, P. Block 501).
(j)Safety nuts (16) with cotter pins (19) and install washers (17) and nuts (18).
(2)Connect bonding straps (3, 12).
(a)Position bonding straps (12) on hinge arms (15) and install bolts (13) and nuts (14).
(b)Position bonding straps (3) on fuselage structure and install bolts (4), washers (5) and nuts (6).
(c)For electrical bonding refer to 20-28-11, P. Block 801.
(3)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition on fuselage internal structure above door and apply if necessary (Ref. 51-75-10, P. Block 801).
(3)Install heat insulation.
(4)Install sidewall panel above door.
(5)Open BULK cargo compartment door.
(6)Remove safety lock and close AFT cargo compartment doors (Ref. 52-30-00, P. Block 301).
(7)Close and lock BULK cargo compartment door.
(8)Remove access platform.

CAUTION : PERCENTAGE (%) OF ALLOWABLE DAMAGE IS ALWAYS RELATED TO THE NOMINAL MATERIAL THICKNESS AS SPECIFIED IN SRM (STRUCTURAL REPAIR MANUAL).

NOTE : Should crack formation be suspected during the following inspection/check, an approved non-destructive test must be carried out.
If a crack is subsequently proved to exist, a structural repair must be carried out, or the components must be replaced.

1. Reasons for the Job

A. Inspection of hinge arms, hinge bolts and hinge fittings

B. Measurement of fits and clearances

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-34-11, P. Block 501	BULK Cargo Compartment Door
- 52-34-12, P. Block 401	Suspension
	SRM - Structural Repair Manual

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Open AFT and BULK cargo compartment doors and secure AFT cargo compartment door with safety lock (Ref. 52-30-00, P. Block 301).
(3)Close and lock BULK cargo compartment door.
(4)Remove sidewall panels above the door.
(5)Remove heat insulation from around hinge area on fuselage structure.

B. Inspection/Check
(1)The following areas have specific damage criteria:
(a)Hinge arm attach fittings
(b)Hinge arm
R (c)For the damage limits for (a) and (b) refer to the
R SRM 52-30-00, P. Block 101, Machined Parts.
R (d)Hinge bolts
(2)Inspect hinge arms (6), hinge arm attach fittings (5, 7) and hinge bolts (1, 3) for damage, cracks, corrosion, marks, loose or missing rivets and condition of paint.

CAUTION : IF ANY DAMAGED COMPONENTS HAVE BEEN REPLACED, AN ADJUSTMENT/ TEST OF BULK CARGO COMPARTMENT DOOR MUST BE CARRIED OUT (Ref. 52-34-11, P. Block 501).

(a)Pay special attention to the following:
- Anti-rotating bolts (8) for shearing or deformation. If shearing or deformation exists, remove hinge pins (1) (Ref. 52-34-12, P. Block 401) rework and fit as listed in Table 601.

(3)Measurement of Fits and Clearances (Ref. Fig. 601)
(a)Measure fits and clearances of hinge bolts (1, 3) and bushes (2, 4), refer to Table 601. For removal of hinge arms refer to 52-34-12, P. Block 401.

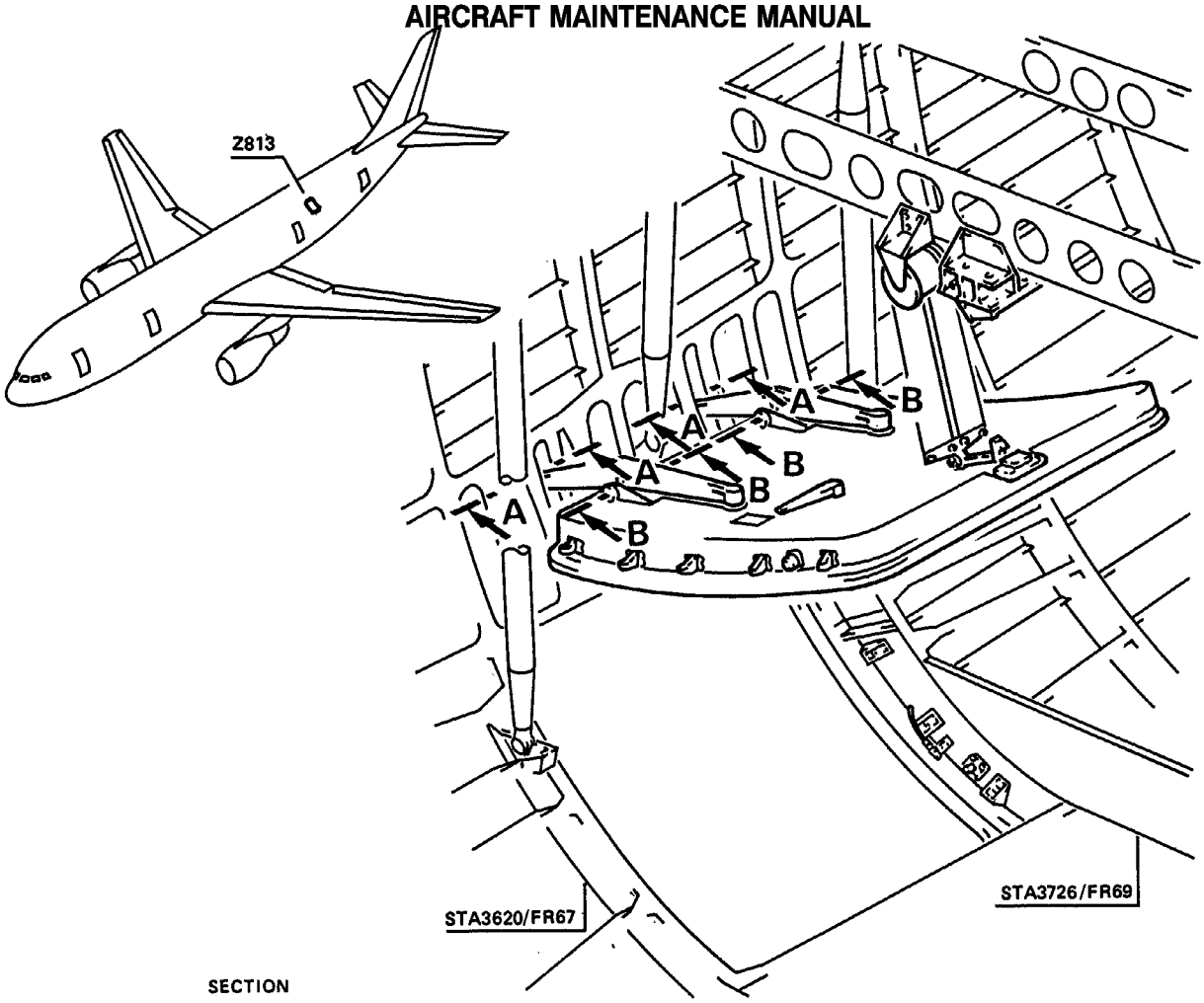
R

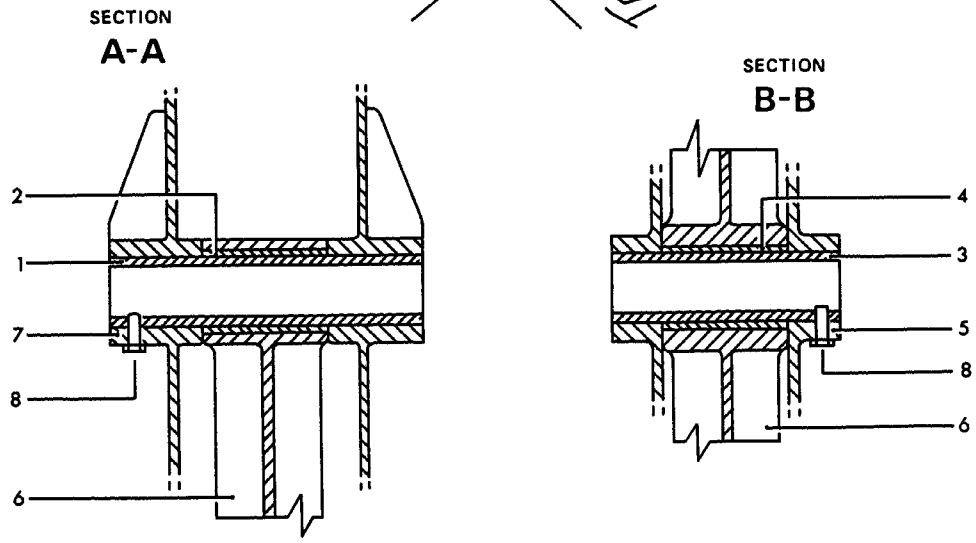
Detail and Item No.	Original Mfg Limits: Dimension mm (Min.)	Original Mfg Limits: Dimension mm (Max.)	Original Mfg Limits: Assy Clearance mm (Min.)	Original Mfg Limits: Assy Clearance mm (Max.)	In-Service Wear Limits: Dimension Limits mm (Min.)	In-Service Wear Limits: Dimension Limits mm (Max.)	In-Service Wear Limits: Max. Allow. Clear. mm (in.)
A-A OD 1	24.959 (0.9826)	24.980 (0.9834)			24.906 (0.9805)		
			0.040 (0.0016)	0.082 (0.0032)			0.146 (0.0057)
A-A ID 2	25.020 (0.9850)	25.041 (0.9858)				25.052 (0.9863)	
B-B OD 3	24.987 (0.9837)	25.000 (0.9843)			24.954 (0.9824)		
			0.000 (0.0000)	0.034 (0.0013)			0.098 (0.0039)
B-B ID 4	25.000 (0.9843)	25.021 (0.9851)				25.052 (0.9863)	

Table 601

(4)Should damage limits be exceeded, a structural repair must be carried out, or components must be replaced.
(5)For removal of scratches, marks and dents refer to 51-73-10, P. Block 801.
(6)For removal of corrosion refer to 51-74-10, P. Block 801.
(7)For repair of paint coatings refer to 51-75-10, P. Block 801.

C. Close-Up
(1)Close and lock door.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Check coating of moisture-removing oil (Mat. 05-027) for good condition around hinge area on fuselage structure and renew if necessary (Ref. 51-75-10, P. Block 801).





B M 6 52 34 12 6 AC M 0-24

Suspension
Figure 601

Printed in France

(4)Install heat insulation around hinge area on fuselage structure.
(5)Install sidewall panels above the door.
(6)Remove safety lock (Ref. 52-30-00, P. Block 301) from AFT cargo compartment door.
(7)Close and lock BULK cargo compartment door.
(8)Remove access platform.

1. Equipment and Materials

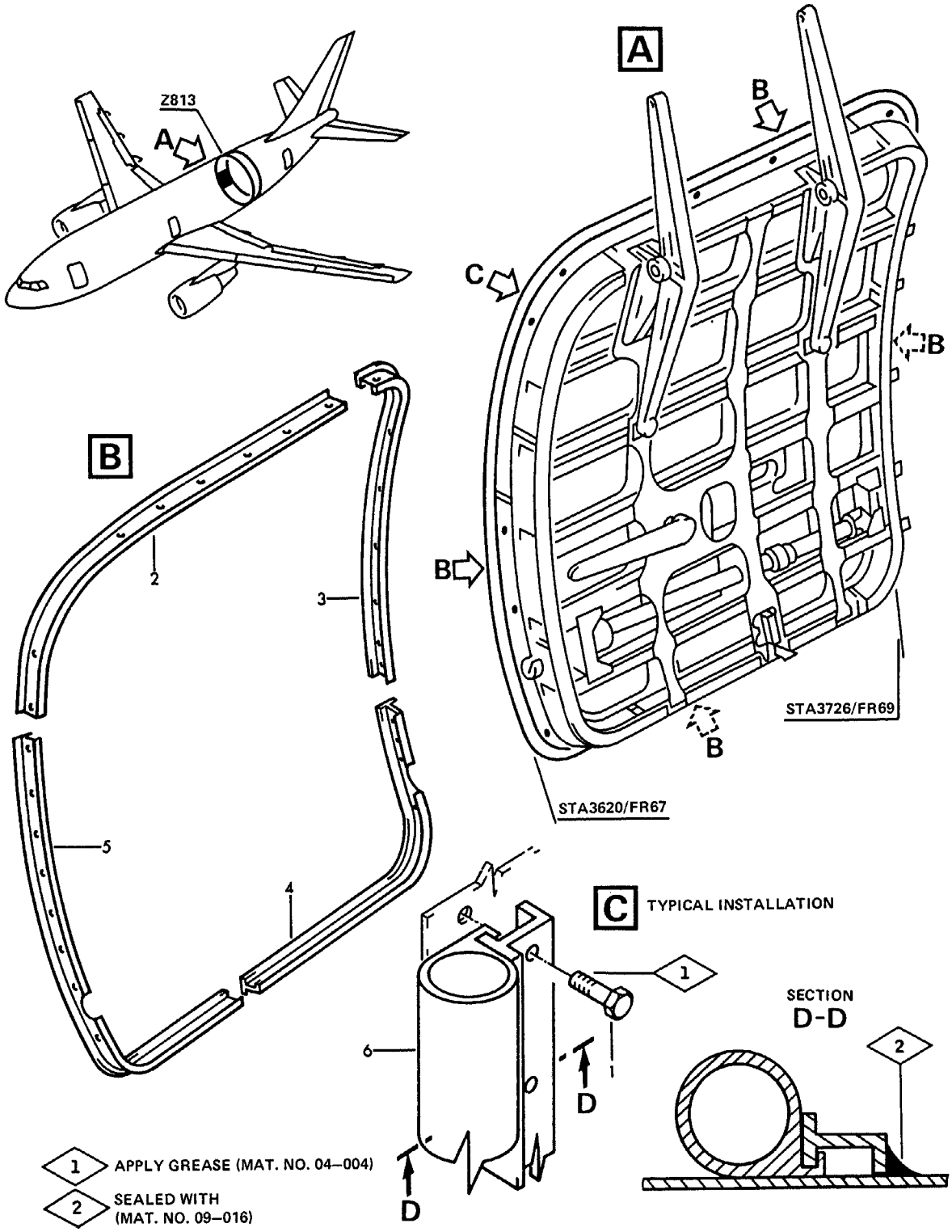
ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B.	Nonmetallic Scraper
C.	Torque Wrench, up to 0.2 m.daN (18 lbf.in.)
D. Material No. 04-004	Common Greases (Ref. 20-31-00)
E. Material No. 05-001	Special Materials (Ref. 20-31-00)
F. Material No. 09-016	Sealants (Ref. 20-31-00)
G. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
H. Material No. 11-008	Cleaning Agents (Ref. 20-31-00)
I. Material No. 16-003	Structure Paints (Ref. 20-31-00)
Referenced Procedure	
- 51-76-10, P. Block 801	Repair of Sealing

2. Procedure

A. Job Set-Up
  (1)Position access platform.
  (2)Open BULK cargo compartment door.

B. Removal (Ref. Fig. 401)
  (1)Remove door seal (6).
    (a)Remove bolts (1) and retainers (2 thru 5).
    (b)Remove sealant from retainers (2 thru 5) and door structure, using nonmetallic scraper.
    (c)Remove seal (6).

C. Preparation for Installation
  (1)Clean seal (6) using alcohol (Mat. No. 11-008).
  (2)Check seal (6) for good condition and renew if necessary.
  (3)Remove sealant from retainers (2 thru 5) and door structure, using cleaning agent (Mat. No. 11-004) and nonmetallic scraper.



Door Seal
Figure 401

D. Installation (Ref. Fig. 401)
  (1)Install door seal.
    (a)Position door seal (6).
    (b)Apply grease (Mat. No. 04-004) to plain shank of bolts (1).
    (c)Position retainers (2 thru 5) and install bolts (1).
    (d)TORQUE bolts (1) to between 0.17 and 0.20 m.daN (15.05 and 17.70 lbf.in.).
    (e)Protect door seal (6) with sealing grease (Mat. No. 05-001).
    (f)Apply sealant (Mat. No. 09-016) to form bead seal between retainers and structure of door. Coat sealant, when dry, with lacquer (Mat. No. 16-003) (Ref. 51-76-10, P. Block 801).

E. Close-Up
  (1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
  (2)Close door.
  (3)Remove access platform.

WARNING : CLEANING AGENT (MAT. NO. 11-004) IS DANGEROUS AND A SKIN IRRITANT. WEAR PROTECTIVE GLOVES OR USE A BARRIER CREAM. WASH IMMEDIATELY WITH CLEAN WATER IF SKIN IS SPLASHED WITH SOLVENT. AVOID INHALING FUMES.

1. Reasons for the Job

A. Repair of:
(1)Chafe marks
(2)Cuts up to 25.4 mm (1.0 in.) in length and not in contact area of seal
(3)Chafe marks and cuts exceeding 25.4 mm (1.0 in.) in length or in contact area of seal by replacement of section.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B.	Lint-free Cloth
C.	Knife
D.	Very Fine Emery Cloth
E.	Spatula
F.	Wooden Bonding Blocks
G.	C-Clamps
H. Material No. 05-023	Special Materials (Ref. 20-31-00)
J. Material No. 05-024	Special Materials (Ref. 20-31-00)
K. Material No. 08-004	Bonding and Adhesive Compounds (Ref. 20-31-00)
L. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
Referenced Procedure	
- 52-34-18, P. Block 401	Seal

3. Procedure

A. Job Set - Up
(1)Position access platform.
(2)Open BULK cargo compartment door.
(3)Remove door seal (Ref. 52-34-18, P. Block 401).

B. Approved Repairs

(1)Repairs of chafe marks.

NOTE : If chafe marks are in contact area of door seal, repair by replacement of section.

(a)Slightly abrade chafe mark using emery cloth.

WARNING : CLEANING AGENT (MAT. NO 11-004) IS DANGEROUS.

(b)Carefully degrease chafe mark with cleaning agent (Mat. No. 11-004) and a lint-free cloth.

(c)Apply bonding and adhesive compound (Mat. No. 08-004) to chafe mark and smooth with a spatula.

(d)Protect treated chafe mark against dust and allow bonding and adhesive compound (Mat. No. 08-004) to dry for 10 to 12 hours.

(2)Repair of cuts up to 25.4 mm (1.0 in.) in length and not in contact area of seal (Ref. Fig. 801, 802).

(a)Drill stop holes of 2 mm (0.08 in.) dia. at the ends of cut.

(b)Open cut by applying pressure to seal and slightly abrade face of cut using emery cloth.

(c)Abrade surface using emery cloth for a distance of 10 mm (0.4 in.) around cut using emery cloth and to a depth of 0.5 mm (0.02 in.).

WARNING : CLEANING AGENT (MAT. NO. 11-004) IS DANGEROUS.

(d)Carefully degrease repair area with cleaning agent (Mat. No. 11-004) and a lint-free cloth.

(e)Apply a thin coat of bonding and adhesive compound (Mat. No. 08-004) to faces of cut .

(f)Press faces of cut together as far as possible and allow them to dry for some minutes.

(g)Cut a piece of tissue (Mat. No. 05-024) to a size necessary to insert it in the repair area.

(h)Apply a thin coat of bonding and adhesive compound (Mat. No. 08-004) to repair area and fill stop holes.

(j)Position piece of tissue (Mat. No. 05-024) in repair area.

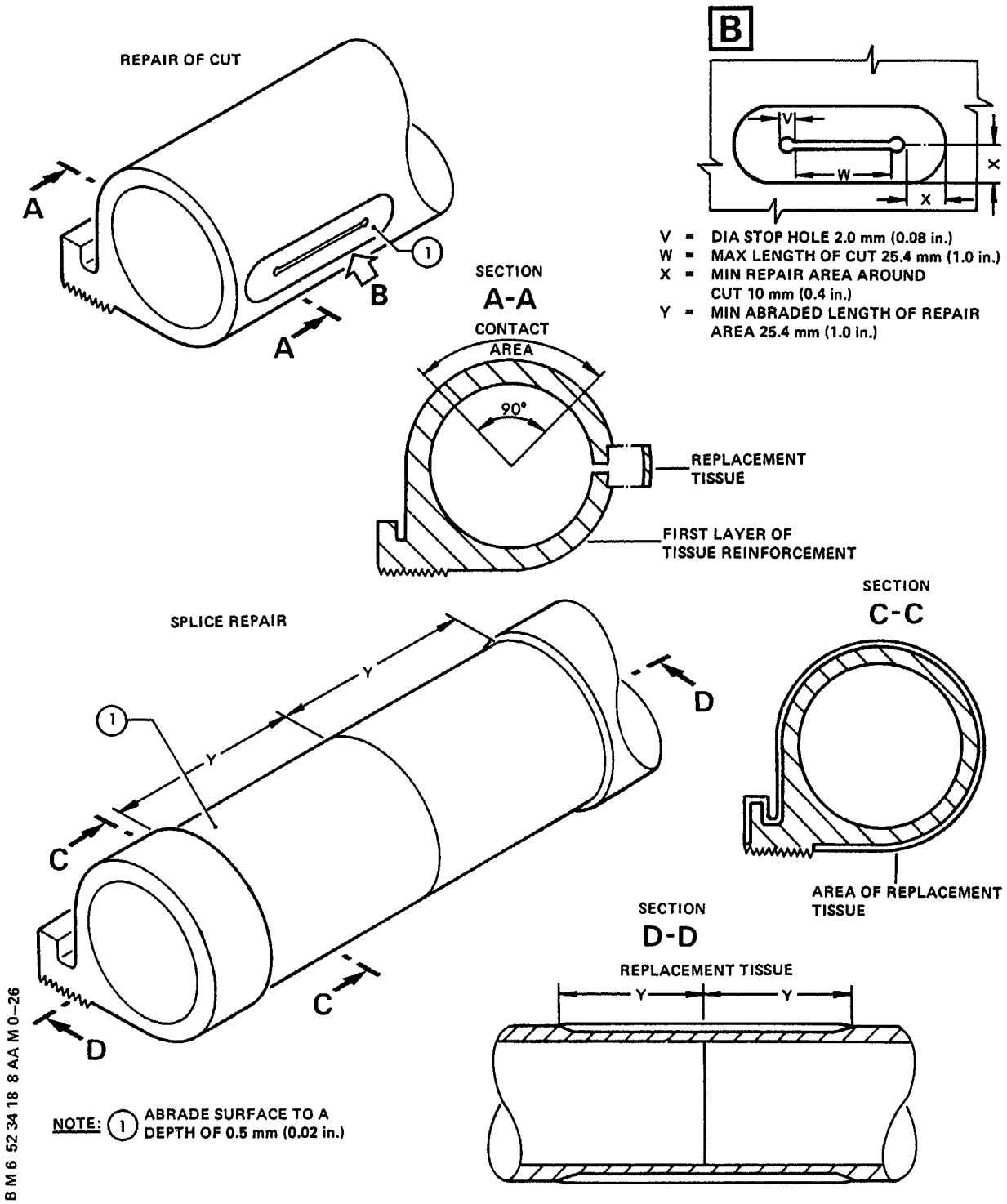
(k)Cover repair area with a layer of foil (Mat. No. 05-023) and position in wooden bonding block.

(l)Compress repair area in wooden bonding block using C-Clamp.

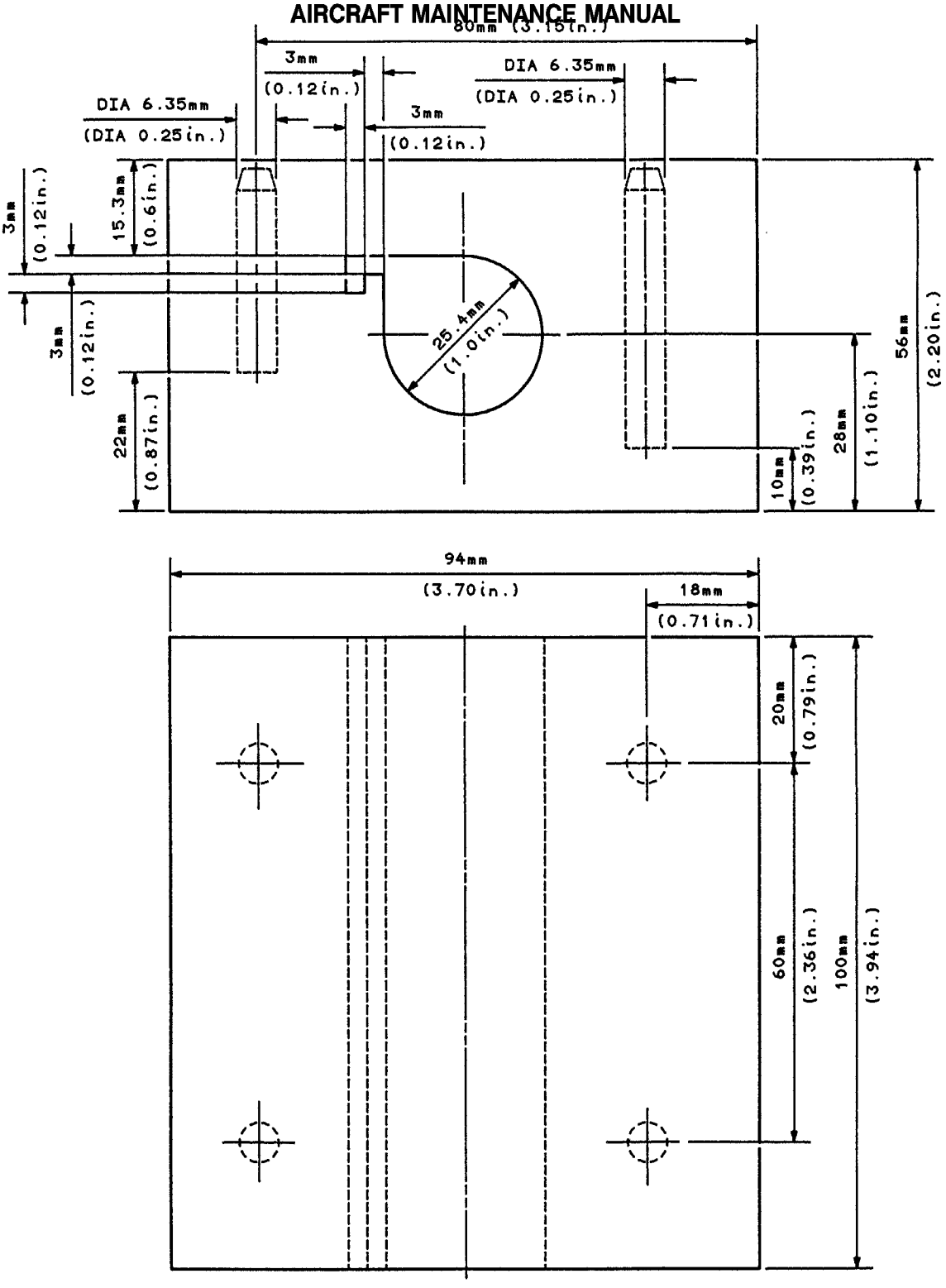
(m)Allow bonding and adhesive compound (Mat. No. 08-004) to dry for 24 hours.

(n)Remove bonding block and foil.

(p)Remove excessive adhesive compound using emery cloth.



Repair of Seal
Figure 801



B M 6 52 34 18 8 ACMO-26

Wooden Bonding Block
Figure 802

(3)Repair of cuts exceeding 25.4 mm (1.0 in.) in length or in contact area by replacement of section.
(Ref. Fig. 801, 802).
(a)Remove the damaged section of door seal.
NOTE : Minimum repair length of replacement section is:
- for straight section, 200 mm (7.87 in.),
- for curved section, 200 mm (7.87 in.) measured from edge of corner.
(b)In curved section, cut and remove damaged seal to same length as replacement curved section.
(c)For straight sections, cut a section of replacement door seal to same length as removed section.
(d)Make certain that quantity of inflation holes is the same as in removed section.
(e)Carefully abrade end of door seal and replacement section over a length of 25.4 mm (1.0 in.) and to a depth of 0.5 mm (0.02 in.) using emery cloth.
WARNING : CLEANING AGENT (MAT. NO. 11-004) IS DANGEROUS.
(f)Carefully degrease repair area with cleaning agent (Mat. No. 11-004) and a lint-free cloth.
(g)Apply a thin coat of bonding and adhesive compound (Mat. No. 08-004) to faces of cuts.
(h)Insert replacement section in door seal, press the end faces together and allow them to dry for some minutes.
(j)Cut tissue (Mat. No. 05-024) to size of repair areas. Apply adhesive compound (Mat. No. 08-004) mating surfaces of tissue and seal.
(k)Position tissue (Mat. No. 05-024) around the repair areas.
(l)Cover repair areas with a layer of foil (Mat. No. 05-023) and position in wooden bonding blocks.
(m)Compress repair areas in wooden bonding blocks using C-Clamps.
(n)Allow bonding and adhesive compound to dry for 24 hours.
(o)Remove bonding blocks and foil.
(q)Remove excessive bonding and adhesive compound using emery cloth.

C. Close-Up
(1)Install repaired door seal on BULK cargo compartment door (Ref. 52-34-18, P. Block 401).
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Close BULK cargo compartment door.
(4)Remove access platform.

1. Reasons for the Job

A. Removal and installation of the following:
NOTE : Item numbers correspond with operations in 3.B. and 3.D.
(1)Spring rod cylinder
(2)Pushrods
(3)Latch assembly
(4)Barrel locks
(5)Support bearings

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B.	Cotter Pins
C.	Corrosion-Resistant Steel Lockwire, 1.0 mm (0.04 in.) dia.
D.	Nonmetallic Scraper
E. Material No. 04-004	Common Greases (Ref. 20-31-00)
F. Material No. 05-002	Special Materials (Ref. 20-31-00)
G. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-34-11, P. Block 501	BULK Cargo Compartment Door
- 52-71-11, P. Block 501	Door Warning Switches

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Open and support BULK cargo compartment door and return handle to CLOSED/LOCKED position.
(3)Remove door insulation mat.

B. Removal
(1)Spring Rod Cylinder (Ref. Fig. 401)
CAUTION : SPRING ROD CYLINDER (8) IS UNDER LOAD.
(a)Disconnect spring rod cylinder (8) from lever (20).
1 Remove cotter pin (17) and nut (16).
2 Remove bolt (11) and washers (9, 10).
NOTE : Removing bolt (11) also disconnects pushrod (14) from lever (20).
3 Allow spring rod cylinder (8) to spring down and clear of lever (20).
4 Position pushrod (14) and temporarily install bolt (11), washers (9, 10) and nut (16) to lever (20).
5 Hand tighten nut (16).

(b)Disconnect spring rod cylinder (8) from bracket (5).
1 Remove cotter pin (1) and nut (2).
2 Withdraw bolt (6) and remove washers (3) and bushes (4, 7). Record location of bushes (4, 7) for subsequent installation.
(c)Remove bracket (5).

** ON RIVETED BRACKET

1 Not applicable

** ON BOLTED BRACKET

1 Remove nuts (21), washers (22), bolts (23), washers (22), bracket (5) and shims (24).

(2)Pushrods (Ref. Fig. 401, 403)

R **ON A/C 001-100,

R Post SB 52-2062 For A/C 001-100,

(2)Pushrods (Ref. Fig. 401, 402, 403)

**ON A/C ALL

CAUTION : SPRING ROD CYLINDER (8) IS UNDER LOAD.
(a)Remove cotter pins (17), nuts (16), washers (9, 10) and bolts (11, 15).
(b)Remove pushrods (14, 32). Measure and record length of push-rods (14, 32) between rod end centers (12).
(c)Remove bushes (18, 19). Record location of bushes (18, 19) for subsequent installation.

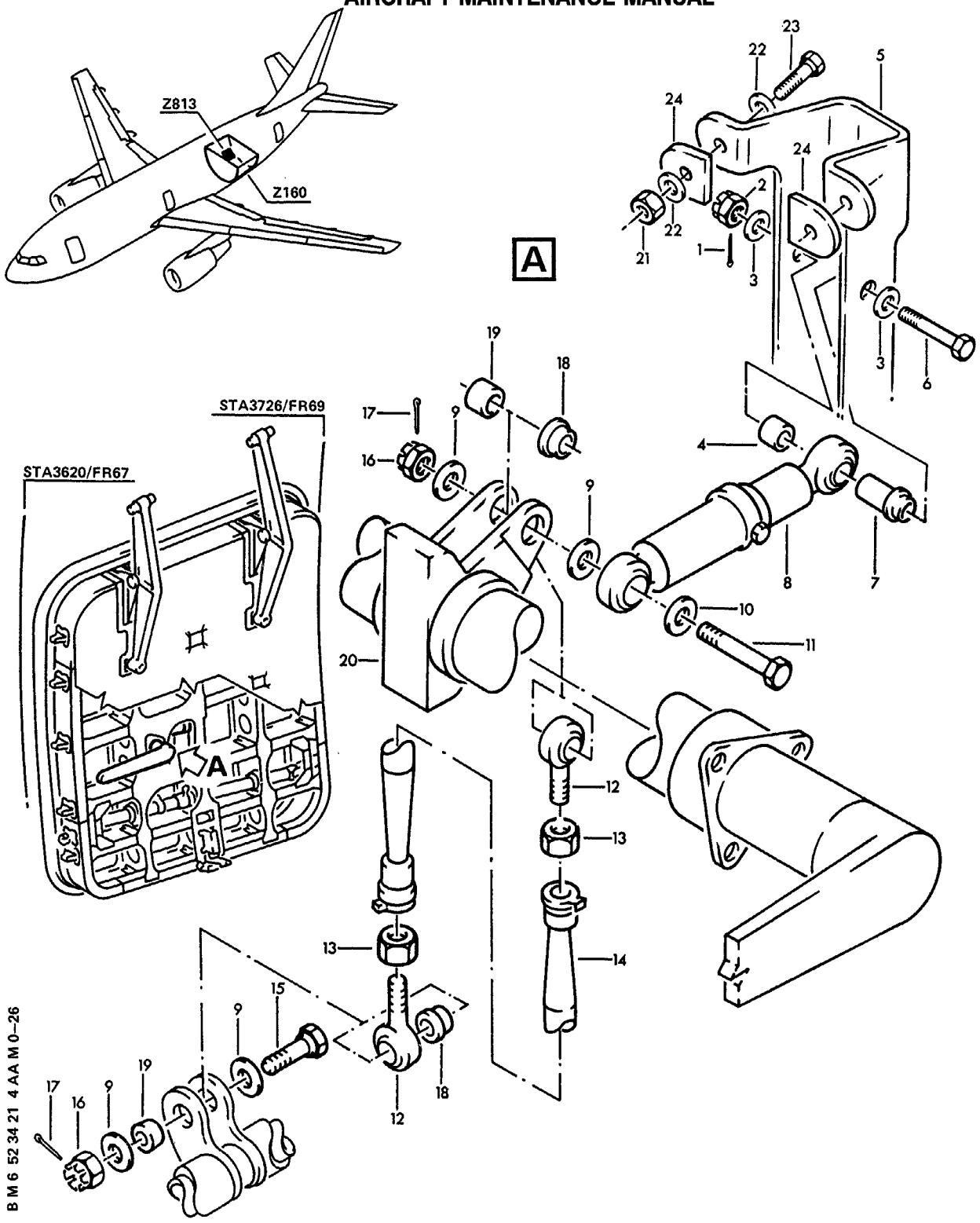
R **ON A/C 001-100,

R Post SB 52-2062 For A/C 001-100,

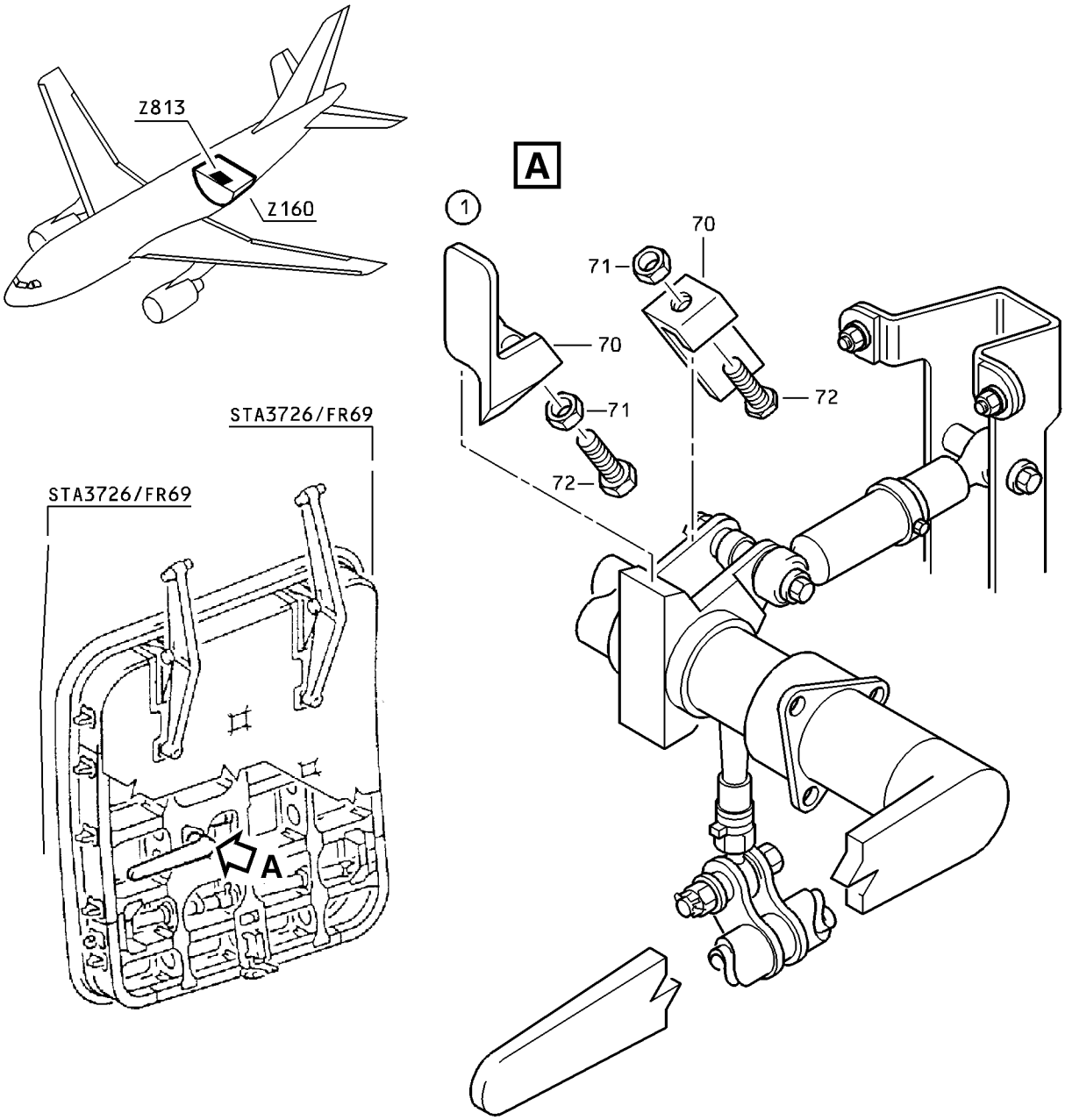
CAUTION : SPRING ROD CYLINDER (8) IS UNDER LOAD.
(a)Remove cotter pins (17), nuts (16), washers (9, 10) and bolts (11, 15).
(b)Remove pushrods (14, 32). Measure and record length of push-rods (14, 32) between rod end centers (12).
(c)Remove bushes (18, 19). Record location of bushes (18, 19) for subsequent installation.
(d)Remove locking wire, locking nut (71) and adjustment screw (72) from adjustable stop (70).

**ON A/C ALL

(3)Latch Assembly (Ref. Fig. 403)
(a)Disconnect pushrod (32).
1 Remove cotter pin (17), nut (16), washers (9) and bolt (15)



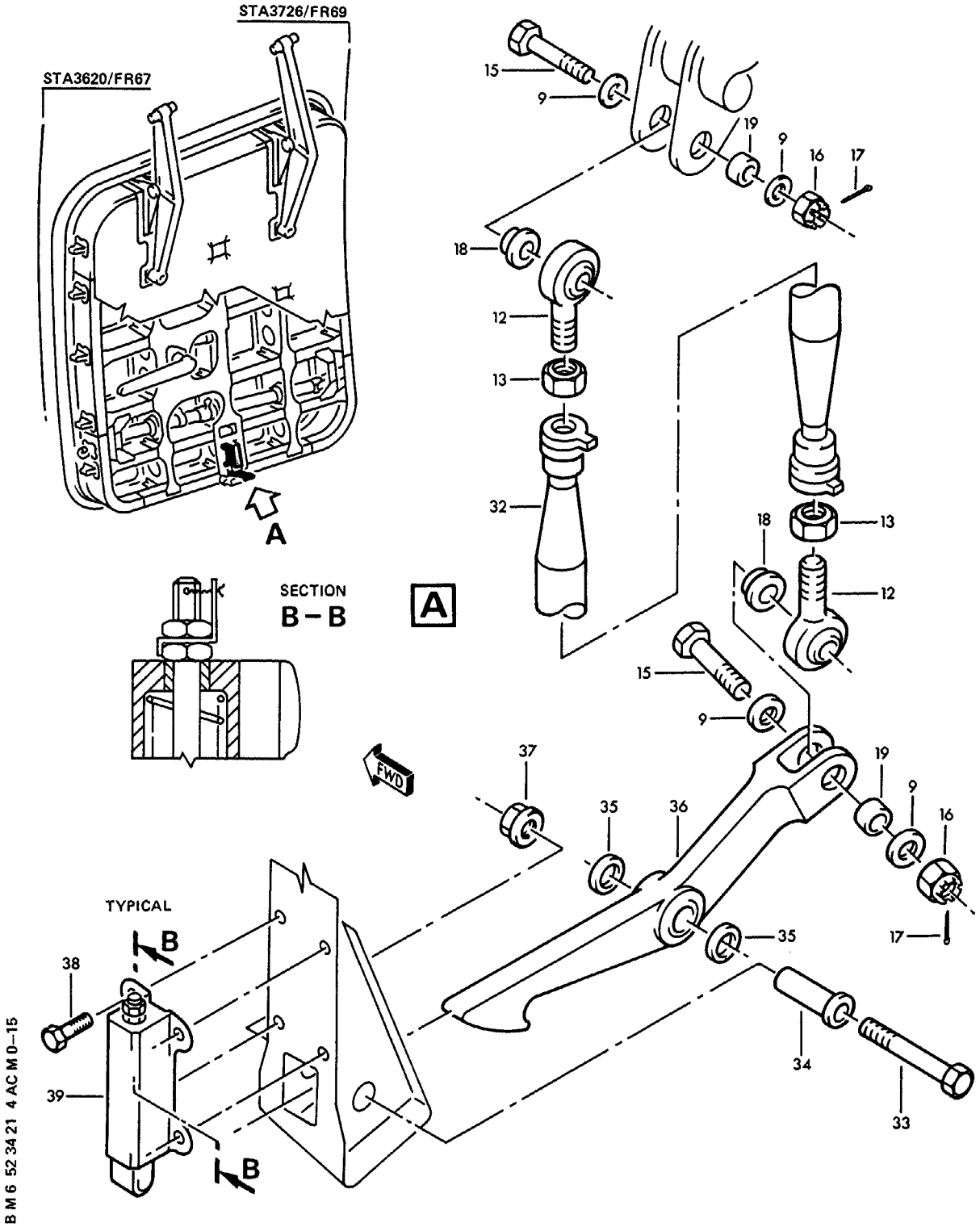
Spring Rod Cylinder and Pushrod
Figure 401



BM6 52 34 21 4 ABM0 00

(1) ALTERNATIVE FITTING

Adjustable Stop
Figure 402



Latch Assembly
Figure 403

from fork end of hook (36).
2 Move pushrod (32) clear of hook (36).
3 Remove bushes (18, 19) from hook (36). Record location of bushes (18, 19) for subsequent installation.
(b)Remove spring rod cylinder (39).
1 Remove bolts (38) and spring rod cylinder (39).
(c)Remove hook (36).
1 Remove nut (37), bolt (33), bush (34), washers (35) and hook (36).
(4)Barrel Locks (Ref. Fig. 404)
(a)Remove nuts (46), washers (47) and bolts (50), securing flange (49) and universal joint (48).
(b)Unscrew flange (49) and withdraw barrel lock (44) from splined shaft of universal coupling (48). Record position of barrel lock (44) for subsequent installation.
(c)Remove washers (51) from barrel lock (44).
(d)Remove flange (49).
(5)Support Bushes (Ref. Fig. 405)
(a)Remove barrel locks (44) (Ref. Para. 3. B. (4)).
(b)Remove bolts (54) and support bushes (43, 45).

C. Preparation for Installation
(1)Unless otherwise specified, clean all bearing surfaces, washers, nuts, screws, bolts, bushes and coat thinly with grease (Mat. No. 04-004) before installation.
(2)Transfer warning switch striker plate assembly (52) to replacement barrel lock (44), if necessary.

D. Installation (Ref. Fig. 401, 403, 404)
(Ref. Fig. 405)

R **ON A/C 001-100,

R Post SB 52-2062 For A/C 001-100,

D. Installation (Ref. Fig. 401, 402, 403)
(Ref. Fig. 404, 405)

**ON A/C ALL

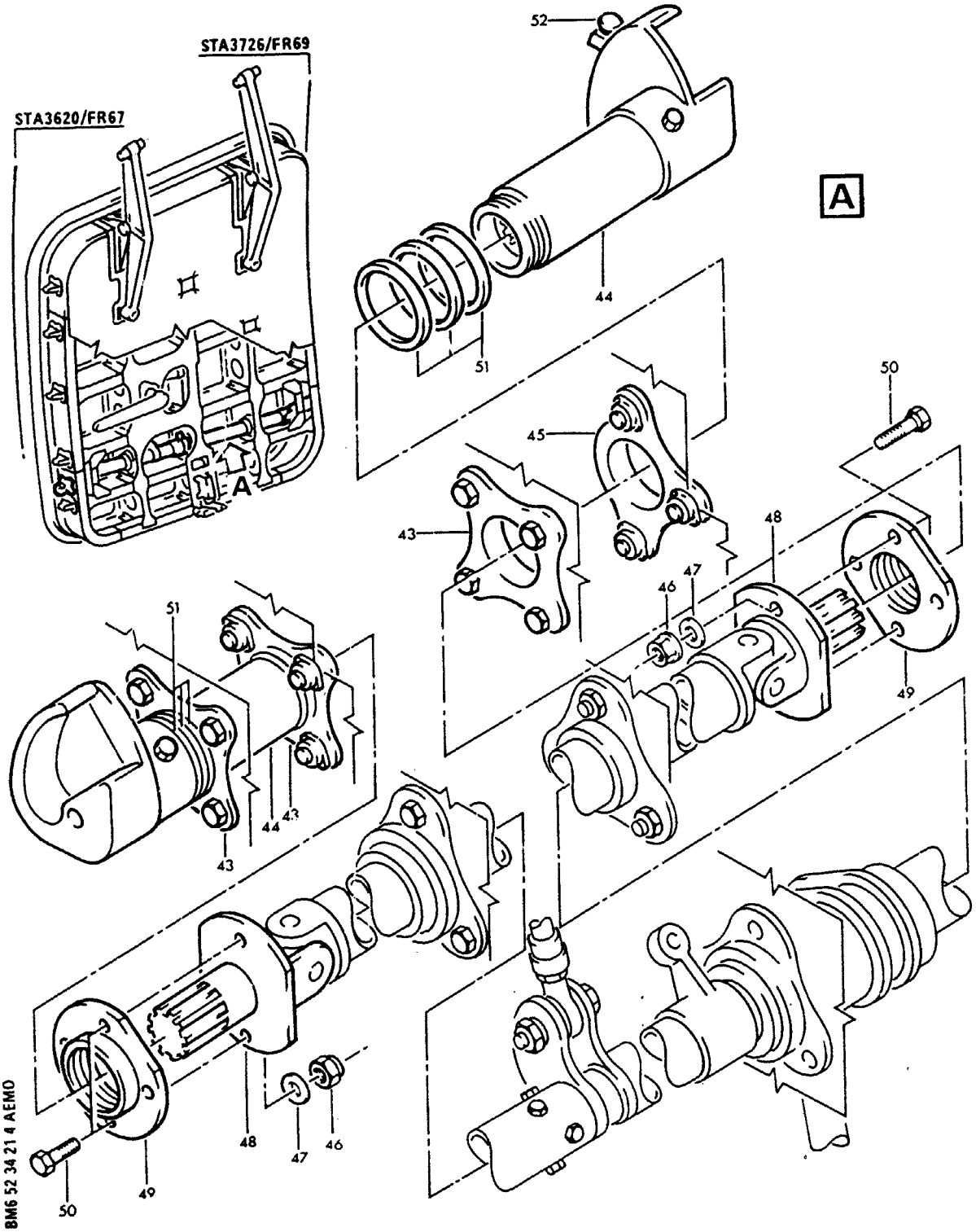
(1)Install bracket (5)

** ON RIVETED BRACKET

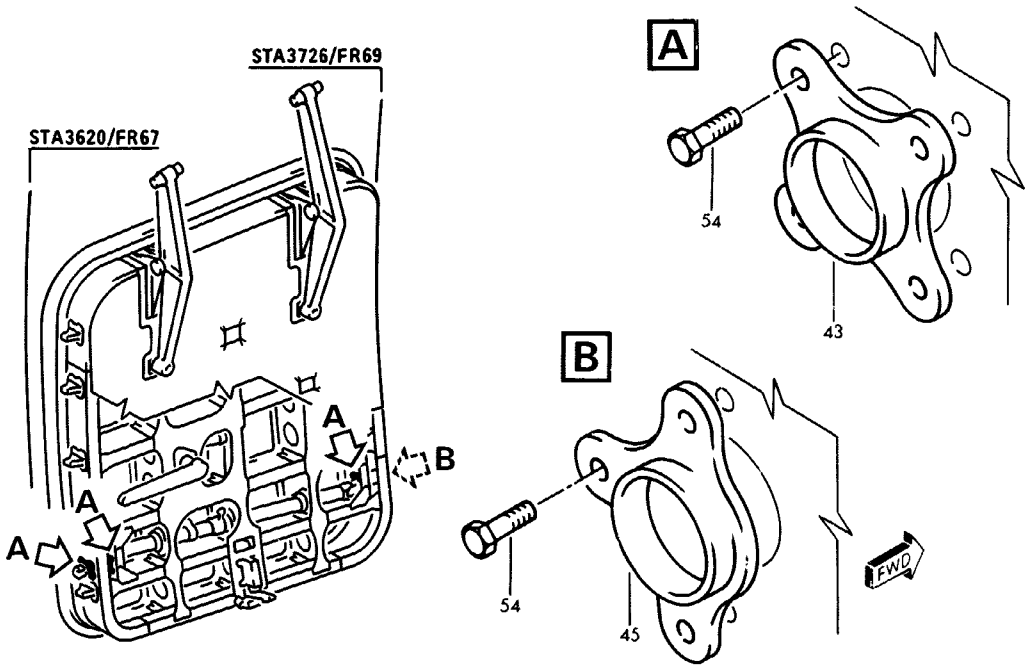
(a)Not applicable

** ON BOLTED BRACKET

(a)Position shims (24), bracket (5), washers (22), install bolts (23) and nuts (21). Adjust exterior handle as required (Ref. 52-34-11,



Barrel Locks
Figure 404



BM6 52 34 21 4 AGMO

Support Bushes
Figure 405

P. Block 501).

(2)Spring Rod Cylinder

(a)Position spring rod cylinder (8) and bushes (4, 7).

(b)Install washers (3), bolt (6) and nut (2).

(c)Safety nut (2) with cotter pin (1).

(d)Remove nut (16), washers (9, 10) and bolt (11) from lever (20). Make certain pushrod (14) remains in position.

(e)Make certain that bushes (18, 19) are installed.

(f)Compress and position spring rod cylinder (8).

(g)Install bolt (11), washers (9, 10) and nut (16).

(h)Safety nut (16) with cotter pin (17).

(3)Pushrods
(a)Set distance, between centers of rod ends (12), to dimensions recorded on removal.
(b)Tighten locknuts (13) and safety with lockwire.
(c)Position bushes (18, 19) and pushrods (14, 32).
(d)Install washers (9), bolts (15) and nuts (16).
(e)Safety nuts (16) with cotter pins (17).
(f)Compress and position spring rod cylinder (8).
(g)Install bolt (11), washers (9, 10) and nut (16).
(h)Safety nut (16) with cotter pin (17).
(4)Latch Assembly
(a)Install hook (36).
1 Position hook (36), washer (35) and bush (34).
2 Install bolt (33) and nut (37).
(b)Install spring rod cylinder (39).
1 Position spring rod cylinder (39) and install bolts (38).
NOTE : Make certain that locknuts of spring rod cylinder (39) are safetied with tabwasher and lockwire.
(c)Install pushrod (32) to hook (36).
1 Position pushrod (32) and bushes (18, 19).
2 Install bolt (15), washers (9) and nut (16).
3 Safety nut (16) with cotter pin (17).
(5)Barrel Locks
(a)Loosen bolts (54) sufficiently to allow support bearings (43, 45) to realign when barrel lock (44) is inserted.
(b)Install adjustment washers (51) to barrel lock (44), as required.
(c)Position flange (49) on splined shaft of universal coupling (48).
(d)Position barrel lock (44) through bearings (43, 45) and engage splined shaft of universal coupling (48). Make certain barrel lock (44) is located in position recorded at removal.
(e)Screw flange (49) to threaded shaft of barrel lock (44).
(f)Tighten flange (49) until adjustment washers (51) are tight against support structure.
(g)Unscrew flange (49) until first pair of holes align with securing holes in flange of universal coupling (48).
NOTE : Flange adjustment must not exceed one quarter of one turn.
(h)Install bolts (50), washers (47) and nuts (46).
(j)Tighten bolts (54) securing support bushes (43, 45).

(6)Support Bushes
(a)Position support bushes (43, 45).
(b)Install barrel locks (44) (Ref. 3. D. (4)).
(c)Install bolts (54).

R **ON A/C 001-100,

R Post SB 52-2062 For A/C 001-100,

(1)Install bracket (5).

** ON RIVETED BRACKET

(a)Not applicable

** ON BOLTED BRACKET

(a)Position shims (24), bracket (5), washers (22), install bolts (23) and nuts (21). Adjust exterior handle as required (Ref. 52-34-11, P. Block 501).
(2)Spring Rod Cylinder
(a)Position spring rod cylinder (8) and bushes (4, 7).
(b)Install washers (3), bolt (6) and nut (2).
(c)Safety nut (2) with cotter pin (1).
(d)Remove nut (16), washers (9, 10) and bolt (11) from lever (20). Make certain pushrod (14) remains in position.
(e)Make certain that bushes (18, 19) are installed.
(f)Compress and position spring rod cylinder (8).
(g)Install bolt (11), washers (9, 10) and nut (16).
(h)Safety nut (16) with cotter pin (17).
(j)Install adjustment stop screw (72) with locking nut (71).
1 Adjust stop screw (72) until contact between head of screw and lever (20) is achieved.
2 Turn stop screw (72) a further 1/10 rotation to ensure no spring load on handle mechanism.
3 Secure stop screw (72) with locking nut (71) and locking wire.

(3)Pushrods
(a)Set distance, between centers of rod ends (12), to dimensions recorded on removal.
(b)Tighten locknuts (13) and safety with lockwire.
(c)Position bushes (18, 19) and pushrods (14, 32).
(d)Install washers (9), bolts (15) and nuts (16).
(e)Safety nuts (16) with cotter pins (17).
(f)Compress and position spring rod cylinder (8).
(g)Install bolt (11), washers (9, 10) and nut (16).
(h)Safety nut (16) with cotter pin (17).
(4)Latch Assembly
(a)Install hook (36).
1 Position hook (36), washer (35) and bush (34).
2 Install bolt (33) and nut (37).
(b)Install spring rod cylinder (39).
1 Position spring rod cylinder (39) and install bolts (38).
NOTE : Make certain that locknuts of spring rod cylinder (39) are safetied with tabwasher and lockwire.
(c)Install pushrod (32) to hook (36).
1 Position pushrod (32) and bushes (18, 19).
2 Install bolt (15), washers (9) and nut (16).
3 Safety nut (16) with cotter pin (17).
(5)Barrel Locks
(a)Loosen bolts (54) sufficiently to allow support bearings (43, 45) to realign when barrel lock (44) is inserted.
(b)Install adjustment washers (51) to barrel lock (44), as required.
(c)Position flange (49) on splined shaft of universal coupling (48).
(d)Position barrel lock (44) through bearings (43, 45) and engage splined shaft of universal coupling (48). Make certain barrel lock (44) is located in position recorded at removal.
(e)Screw flange (49) to threaded shaft of barrel lock (44).
(f)Tighten flange (49) until adjustment washers (51) are tight against support structure.
(g)Unscrew flange (49) until first pair of holes align with securing holes in flange of universal coupling (48).
NOTE : Flange adjustment must not exceed one quarter of one turn.
(h)Install bolts (50), washers (47) and nuts (46).
(j)Tighten bolts (54) securing support bushes (43, 45).

R (6)Support Bushes
R (a)Position support bushes (43, 45).
R (b)Install barrel locks (44) (Ref. 3. D. (4)).
R (c)Install bolts (54).

R **ON A/C ALL

E. Test
(1)Carry out adjustment/test of BULK cargo compartment door (Ref. 52-34-11, P. Block 501).
(2)Carry out test of door warning switches (Ref. 52-71-11, P. Block 501).

F. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(3)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition on all internal surfaces and structure of BULK cargo compartment door and renew as necessary (Ref. 51-75-10, P. Block 801).
(4)Install door insulation mat.
(5)Close BULK cargo compartment door.
(6)Remove access platform.

LOCKING MECHANISM - INSPECTION/CHECK

NOTE : Should a defect be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a defect is subsequently proved to exist, a structural repair must be carried out, or component must be replaced (Ref. 52-34-21, P. Block 401).

1. Reasons for the Job

A. Inspection to determine locking mechanism is free from damage

B. Check of locking mechanism operation

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.3 m (7.5 ft.)
B. 98A52307622000	Gage - Measuring, Bulk Cargo Compartment Door Locking Mechanism
C. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-34-11, P. Block 501	BULK Cargo Compartment Door
- 52-34-21, P. Block 401	Locking Mechanism

3. Procedure

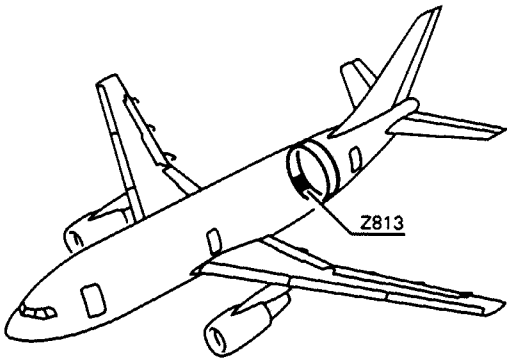
A. Job Set-Up
(1)Position access platform.
(2)Open door and return exterior handle to CLOSED/LOCKED position.
(3)Remove door insulation mat.

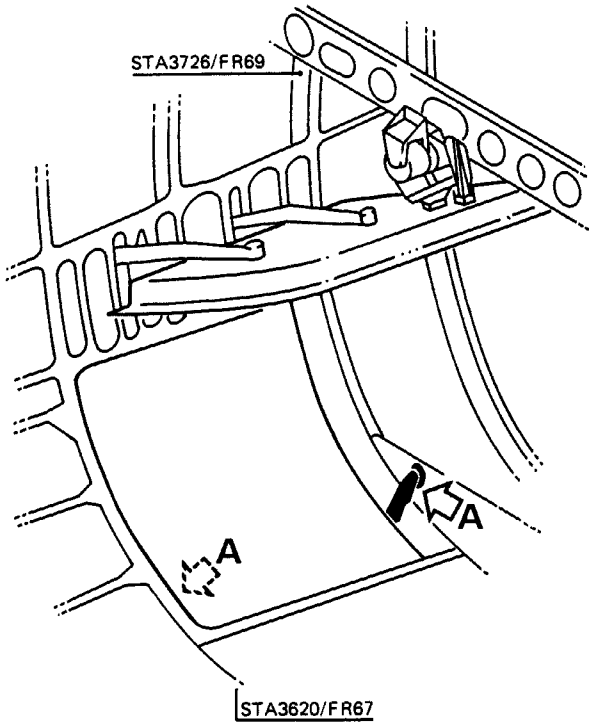
B. Inspection/Check of Locking Mechanism
(1)Check that locking mechanism and hardware are secure and safetied.
(2)Inspect locking mechanism for:
(a)Corrosion. For the removal of corrosion refer to 51-74-10, P. Block 801.
(b)Scratches, marks and dents. For the repair of scratches, marks and dents refer to 51-73-10, P. Block 801.
(c)Satisfactory paint coating. For the repair of paint coatings refer to 51-75-10, P. Block 801.
(d)Deformation. Deformed parts must be replaced (Ref. 52-34-21, P. Block 401).
(e)Cracks. Cracked components must be replaced (Ref. 52-34-21, P. Block 401).

C. Check of Locking Mechanism Operation
(1)Make certain that exterior handle locks in CLOSED/LOCKED position. Adjust if necessary (Ref. 52-34-11, P. Block 501).
(2)Close and lock BULK cargo compartment door.
(3)Insert measuring gage P/N 98A52307622000 in inspection holes of barrel locks (1).
(4)Check that red ring of measuring gage P/N 98A52307622000 is visible (Ref. Fig. 601).
If red ring is not visible, locking mechanism must be adjusted, refer to 52-34-11, P. Block 501.
(5)Remove measuring gage P/N 98A52307622000.

D. Test
(1)Check door locking mechanism for smooth operation by operating interior and exterior handles. Adjust system if necessary (Ref. 52-34-11, P. Block 501).
(2)Open BULK cargo compartment door.

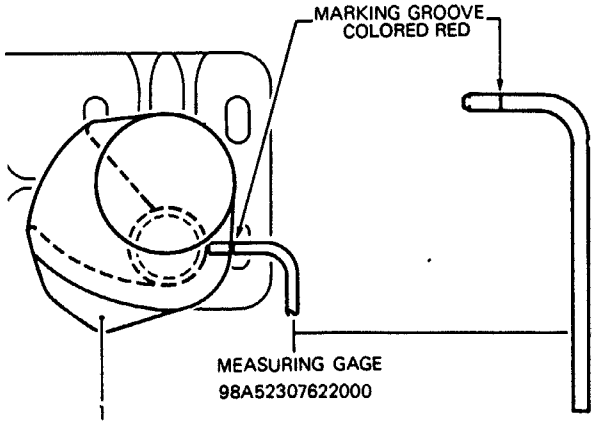
E. Close-Up
(1)Make certain that working area is clean, and clear of tools and miscellaneous items of equipment.
(2)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition on BULK cargo compartment door, and apply if necessary (Ref. 51-75-10, P. Block 801).
(3)Install door insulation mat.
(4)Close and lock BULK cargo compartment door.
(5)Remove access platform.





A
TYPICAL

LOCKING MECHANISM
IN CORRECT CLOSED
POSITION



BM6 52 34 21 6 AA M U

Barrel Lock
Figure 601

FITTINGS - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal and installation of the following:
NOTE : Item numbers correspond with operations in 3.B. and 3.D.
(1)Stop fittings
(2)Latch spigot

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.3 m (7.5 ft.)
B.	Nonmetallic Scraper
C.	Lint-Free Cloth
D. Material No. 04-004	Common Greases (Ref. 20-31-00)
E. Material No. 05-002	Special Materials (Ref. 20-31-00)
F. Material No. 05-027	Special Materials (Ref. 20-31-00)
G. Material No. 09-013	Sealants (Ref. 20-31-00)
H. Material No. 09-016	Sealants (Ref. 20-31-00)
J. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
K. Material No. 16-003	Structure Paints (Ref. 20-31-00)

Referenced Procedures

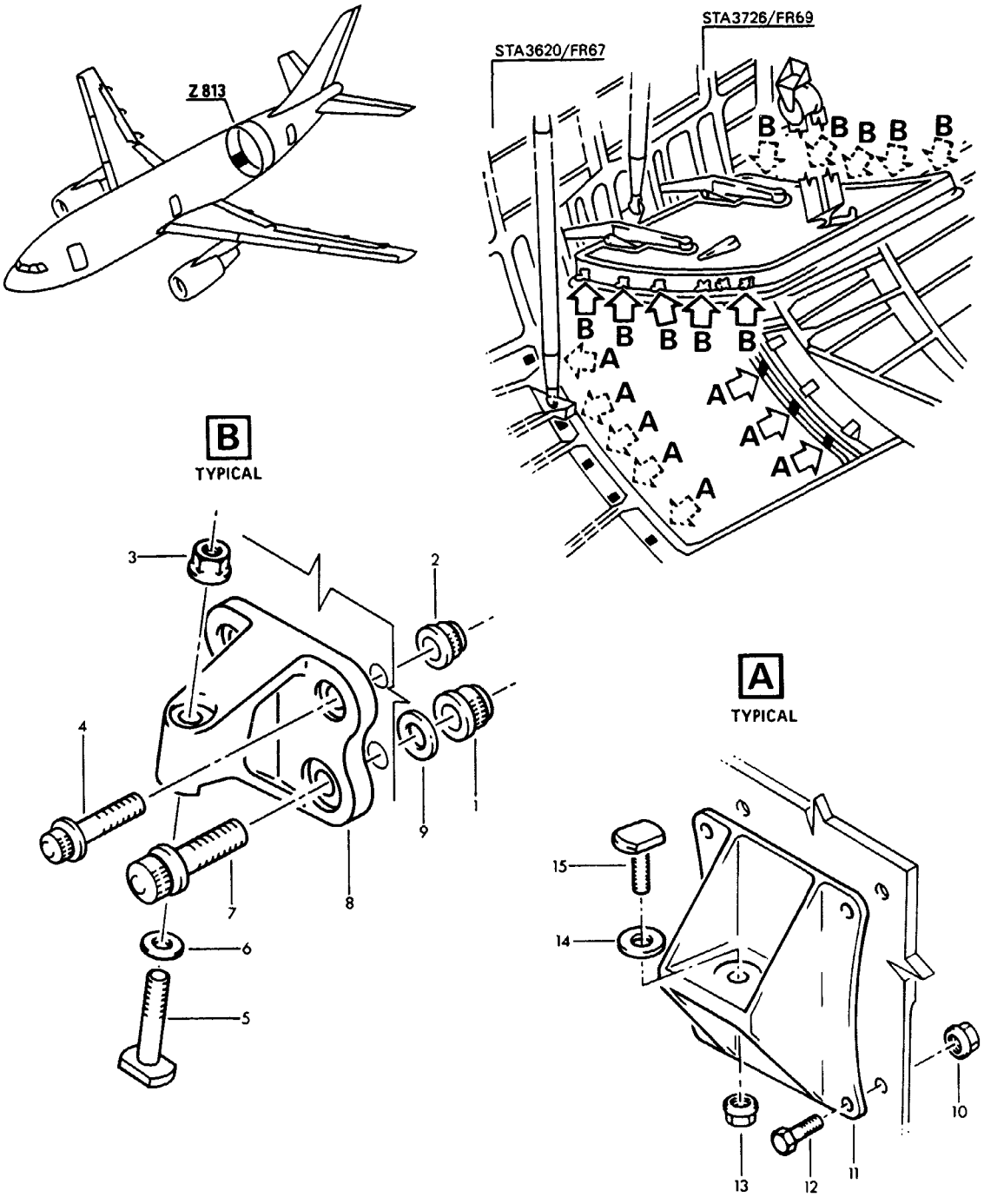
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-34-11, P. Block 501	BULK Cargo Compartment Door
- 52-34-31, P. Block 601	Fittings
- 52-71-11, P. Block 401	Warning Switches
- 53-17-11, P. Block 601	Structure Complete

3. Procedure

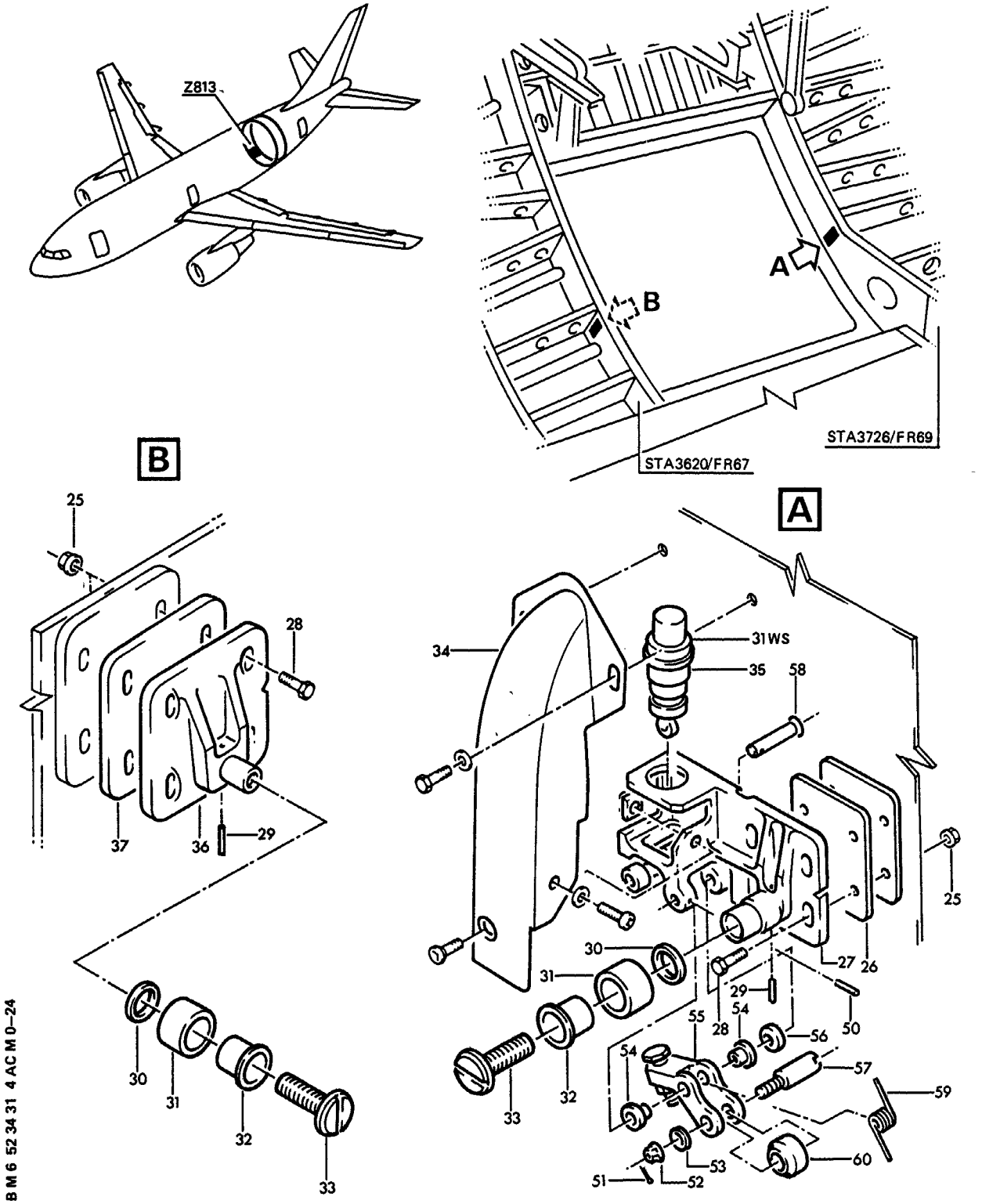
A. Job Set-Up
(1)Position access platform.
(2)Open door and return exterior handle to CLOSED/LOCKED position.
(3)Support door in half-open position.
(4)Remove door insulation mat.
(5)Remove sidewall panels and insulation, as required.

B. Removal
(1)Removal of Stop Fittings (Ref. Fig. 401)
(a)Remove door frame stop fitting (8)
1 Remove nut (3), stop bolt (5) and washer (6).
2 Remove nuts (1, 2), washers (9) and bolts (4, 7).
3 Remove stop fitting (8).
(b)Remove fuselage door frame stop fitting (11)
1 Remove nut (13), stop bolt (15) and washer (14).
2 Remove nuts (10), and bolts (12).
3 Remove stop fitting (11).
(2)Removal of Latch Spigot (Ref. Fig. 402)
(a)Remove rollers (31).
1 Remove spring pins (29), bolts (33), bushes (32), rollers (31) and washers (30).
(b)Remove bellcrank lever (55)
1 Remove spring pin (50), pin (58), spring (59), bellcrank lever (55), washer (56) and bushes (54).
2 Remove cotter pin (51), nut (52), washer (53), bolt (57) and roller (60).
(c)Remove latch spigot (36)
1 Remove nuts (25), bolts (28), latch spigot (36) and serrated plate (37).
(d)Remove latch spigot (27)
1 Remove switch cover (34) by removing attachment screws.
2 Remove door warning switch (35) (Ref. 52-71-11, P. Block 401).
3 Remove nuts (25), bolts (28), latch spigot (27) and serrated plate (26).

C. Preparation for Installation
(1)Remove all damaged sealant using nonmetallic scraper and clean all components with cleaning agent (Mat. No. 11-004).
(2)Make certain that all sharp edges have been rounded.
(3)Inspect area behind stop fittings and latch spigots for corrision and cracks (Ref. 53-17-11, P. Block 601).
(4)Inspect fittings for damage (Ref. 52-34-31, P. Block 601).
(5)Repair paint coatings as required (Ref. 51-75-10, P. Block 801).



Door Stop Fitting
Figure 401



Latch Spigots
Figure 402

D. Installation

(1)Installation of Stop Fittings

(a)Install door stop fitting (8)

1 Apply sealant (Mat. No. 09-013) to plain shank of bolts (4, 7).

2 Apply sealant (Mat. No. 09-013) to mating surfaces between structure and fitting (8).

3 Position stop fitting (8), install bolts (4, 7), washers (9) and nuts (1, 2).

4 Apply corrosion-preventive paste (Mat. No. 05-002) to thread ends of bolts (4, 7).

5 Seal gap, between edge of door frame stop fitting (8) and door frame, using sealant (Mat. No. 09-016).

6 Apply grease (Mat. No. 04-004) to plain shank of stop bolt(5).

7 Install stop bolt (5), washer (6) and nut (3).

8 Coat sealant (Mat. No. 09-016), when dry, with lacquer (Mat. No. 16-003) (Ref. 51-76-10, P. Block 801).

(b)Install fuselage stop fitting (11)

1 Apply sealant (Mat. No. 09-013) to plain shank of bolts (12).

2 Apply sealant (Mat. No. 09-013) to mating surfaces between structure and stop fitting (11).

3 Position stop fitting (11), install bolts (12) and nuts (10).

4 Apply corrosion-preventive paste (Mat. No. 05-002) to thread ends of bolts (12).

5 Seal gap, between edge of fuselage door frame stop fitting (11) and structure, using sealant (Mat. No. 09-016).

6 Apply grease (Mat. No. 04-004) to plain shank of stop bolts (15).

7 Install washer (14), stop bolt (15) and nut (13).

8 Coat sealant (Mat. No. 09-016), when dry, with lacquer (Mat. No. 16-003)(Ref. 51-76-10, P. Block 801).

(2)Installation of Latch Spigot

(a)Install latch spigot (36).

1 Apply sealant (Mat. No. 09-013) to plain shank of bolts (28).

2 Apply corrosion-preventive paste (Mat. No. 05-002) to all contact surfaces between latch spigot (36), serrated plate (37) and serrated plate attached to structure.

3 Position serrated plate (37) and latch spigot (36).

4 Install bolts (28) and nuts (25).

5 Apply corrosion-preventive paste (Mat. No. 05-002) to thread ends of bolts (28).

(b)Install latch spigot (27) at STA3726(FR69).
1 Apply sealant (Mat. No. 09-013) to plain shank of bolts (28).
2 Apply corrosion-preventive paste (Mat. No. 05-002) to all contact surfaces between latch spigot (27), serrated plate (26) and serrated plate attached to structure.
3 Position serrated plate (26) and latch spigot (27).
4 Install bolts (28) and nuts (25).
5 Apply corrosion-preventive paste (Mat. No. 05-002) to thread ends of bolts (28).
6 Install door warning switch (35) (Ref. 52-71-11, P. Block 401).
7 Position switch cover (34) and install attachment screws.
(c)Install bellcrank lever (55) (Ref. Fig. 402).
1 Install bushes (54).
2 Apply corrosion-preventive paste (Mat. No. 05-002) to bolt (57) and pin (58).
3 Position roller (60), install bolt (57), washer (53) and nut (52), and safety with cotter pin (51).
4 Position bellcrank lever (55), washer (56) and spring (59).
5 Install pin (58) and safety with spring pin (50).
(d)Install rollers (31).
1 Install washers (30), rollers (31) and bushes (32).
2 Apply corrosion-preventive paste (Mat. No. 05-002) to bolts (33).
3 Install bolts (33) and safety with spring pins (29).

E. Test
CAUTION : AN ADJUSTMENT/TEST OF BULK CARGO COMPARTMENT DOOR MUST BE CARRIED OUT (REF. 52-34-11, P. BLOCK 501).
(1)Carry out functional and adjustment tests of BULK cargo compartment door (Ref. 52-34-11, P. Block 501).

F. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Check sealant bead (Mat. No. 09-016) around all serrated plates attached to fuselage structure and repair if necessary.
(3)Check coating of moisture-removing oil (Mat. No. 05-027) for good condition on fuselage and door internal structure and apply if necessary (Ref. 51-75-10, P. Block 801).
(4)Install sidewall panels and insulation if removed.
(5)Close BULK cargo compartment door.
(6)Remove access platform.

FITTINGS - INSPECTION/CHECK

NOTE : Should a defect be suspected during the following inspection/check, an approved nondestructive test must be carried out.
If a defect is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

NOTE : For inspection/check of latch fitting, refer to 52-34-21, P. Block 601.

1. Inspection/Check

A. Reasons for the Job
(1)Inspection to determine parts are free from damage
(2)Check to determine parts are free from wear

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.30 m (7.50 ft.)
Referenced Procedures	
- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 51-76-10, P. Block 801	Repair of Sealing
- 52-34-11, P. Block 501	BULK Cargo Compartment Door
- 52-34-21, P. Block 601	Locking Mechanism
- 52-34-31, P. Block 401	Fittings

C. Procedure

(1)Job Set-Up

(a)Position access platform.

(b)Open door and return exterior handle to CLOSED/LOCKED position.

(c)Remove door insulation mat.

(d)Remove sidewall panels in door frame area, as required.

(2)Inspection/Check of Stop Fittings (Ref. Fig. 601)

(a)Check that stop fittings (1, 2) and hardware are secure and safetied.

(b)Inspect stop fittings (1, 2) for:

1 Corrosion: For the removal of corrosion refer to 51-74-10, P. Block 801.

2 Scratches and dents: For the repair of scratches and dents refer to 51-73-10, P. Block 801.

3 Satisfactory paint coating: For the repair of paint coatings refer to 51-75-10, P. Block 801.

4 Deformation: Deformed parts must be replaced.

5 Cracks: Cracked components must be replaced.

(c)Check that head thickness 'a', of stop bolt (3), is not less than 3.7 mm (0.15 in.).

1 Should stated limit be exceeded, stop bolt (3) must be replaced (Ref. 52-34-31, P. Block 401).

(d)Check that head thickness 'b', of stop bolt (4), is not less than 2.7 mm (0.11 in.).

1 Should stated limit be exceeded, stop bolt (4) must be replaced (Ref. 52-34-31, P. Block 401).

(e)Close door.

(f)Check that gap 'c', between stop bolts (3, 4), is not more than 0.4 mm (0.02 in.).

1 Should stated limit be exceeded, stop bolts (3, 4) must be adjusted (Ref. 52-34-11, P. Block 501).

CAUTION : IF ANY DAMAGED COMPONENTS HAVE BEEN REPLACED, AN ADJUSTMENT/TEST OF BULK CARGO COMPARTMENT DOOR MUST BE CARRIED OUT (REF. 52-34-11, P. BLOCK 501).

(g)Open and close door several times and check for smooth operation.

(h)Check sealant for good condition and serviceability. Renew sealant if necessary (Ref. 51-76-10, P. Block 801).

(3)Close-Up

(a)Open door.

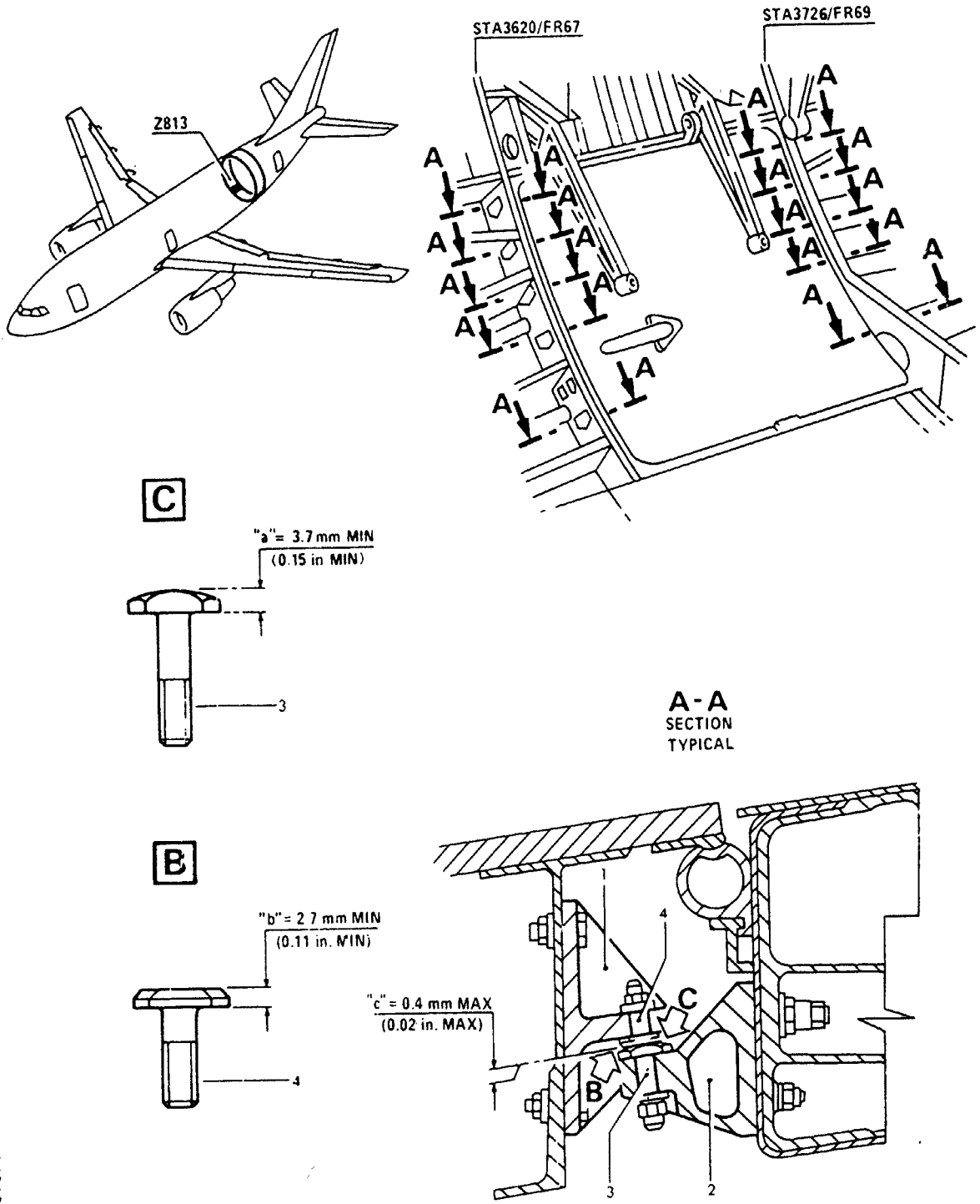
(b)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.

(c)Install sidewall panels.

(d)Install insulation mat.

(e)Close BULK cargo compartment door.

(f)Remove access platform.



BM6 52 34 31 6 AAMO

Fittings
Figure 601

BALANCE MECHANISM - REMOVAL/INSTALLATION

WARNING : MAKE CERTAIN THAT LEAF SPRING DOES NOT TWIST WHEN MEASURING TENSION.

1. Equipment and Materials

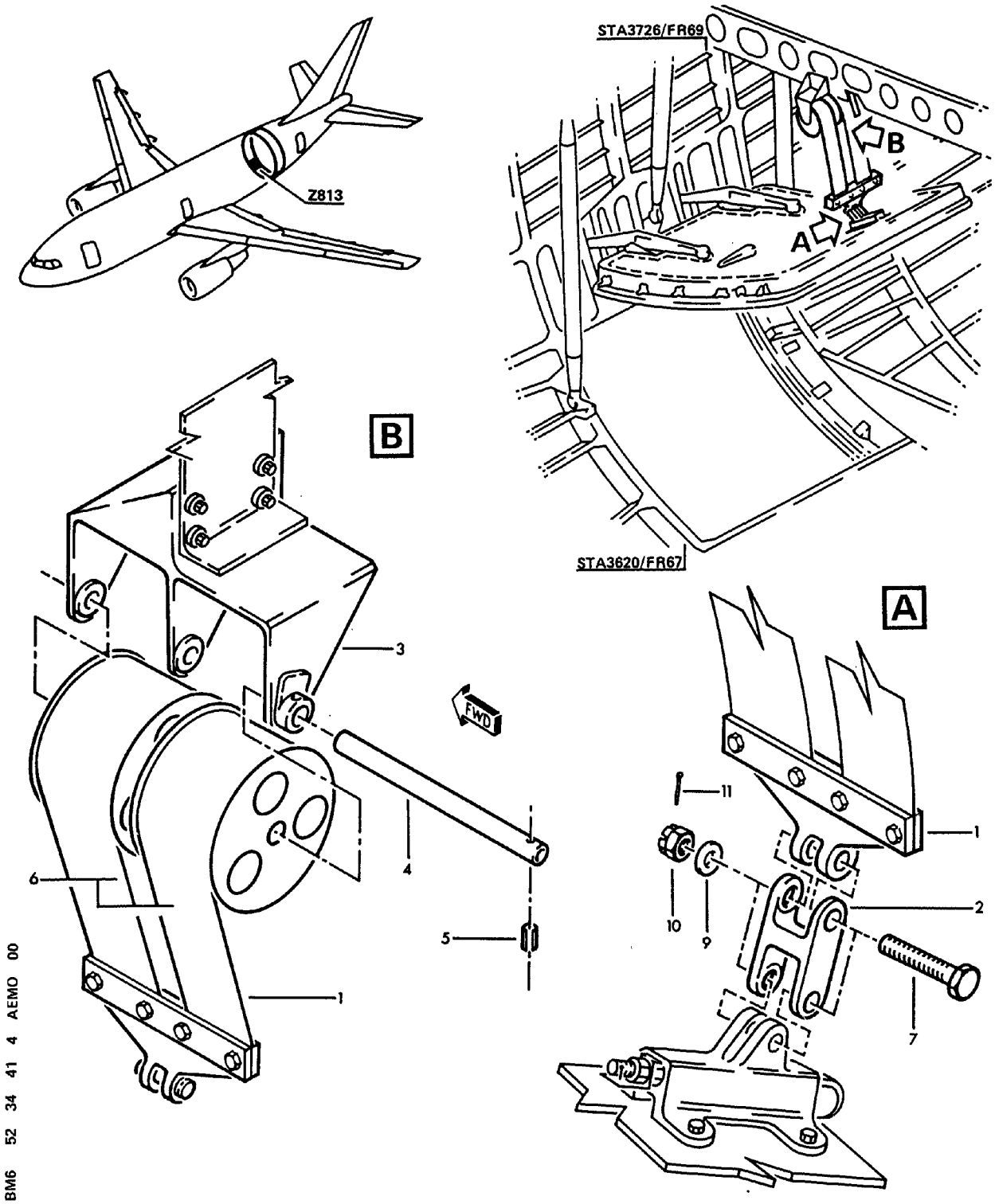
ITEM	DESIGNATION
A.	Access Platform, 2.30 m (7.50 ft.)
B.	Spring Balance, up to 25.0 daN (56.0 lbf.)
C.	Leather Gloves
D.	Protective Goggles
E. Material No. 04-004	Common Greases (Ref. 20-31-00)
F. Material No. 05-002	Special Materials (Ref. 20-31-00)

2. Procedure

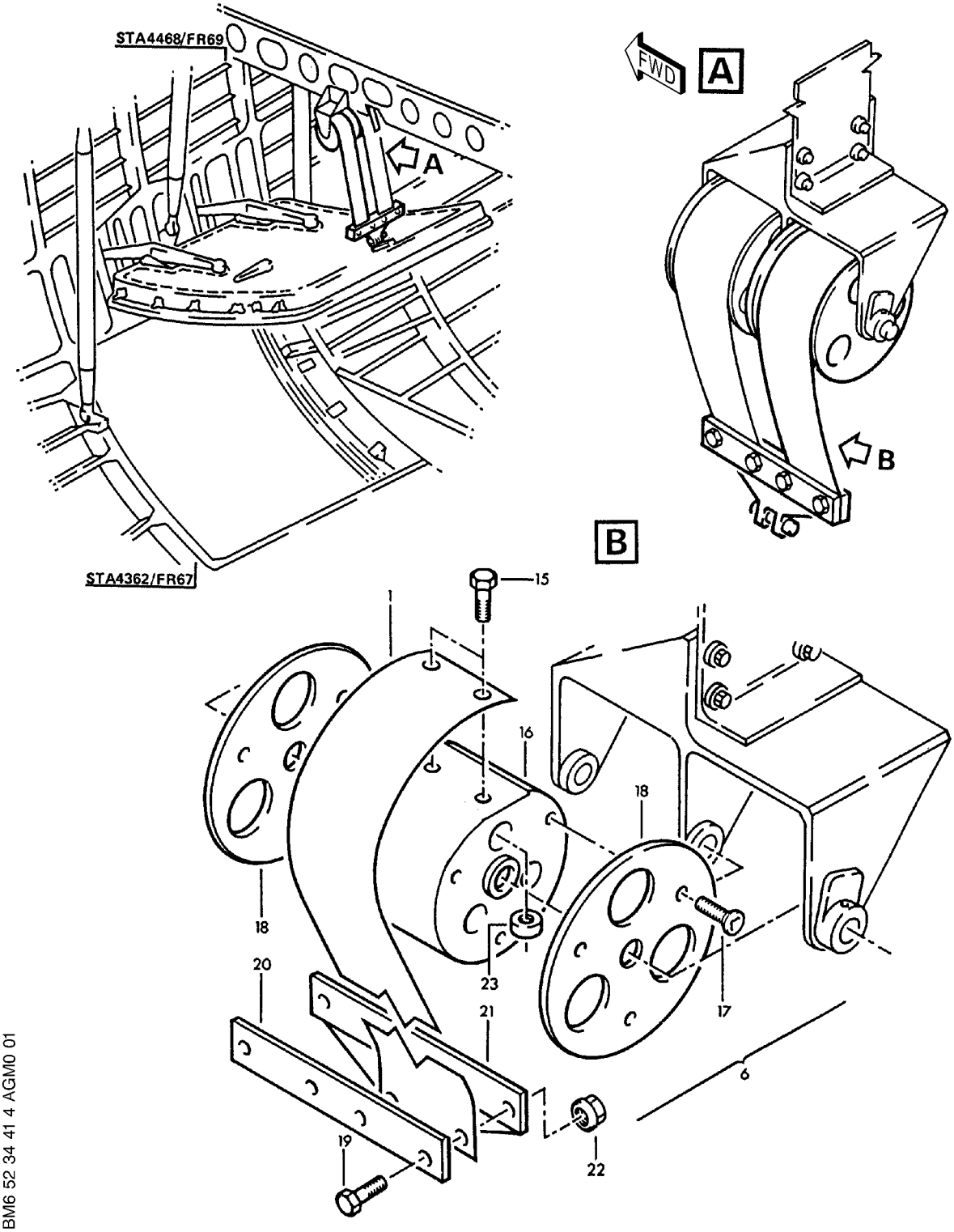
A. Job Set-Up
(1)Position access platform.
(2)Unlock and open door, and return exterior door handle to the CLOSED and recessed position, after barrel locks have cleared lock spigots.
(3)Support door in half-open position.

B. Removal
(Ref. Fig. 401)
(Ref. Fig. 402)
CAUTION : BALANCE MECHANISM IS UNDER TENSION.
R WARNING : THE LEAF SPRING IS UNDER TENSION. WEAR PROTECTIVE GOGGLES AND
R LEATHER GLOVES.
R (1)Disconnect the leaf spring (1) from the fishplate (2) as follows:
R (a)Support the BULK door in its half open position.
R (b)Hold the leaf spring (1) and remove the cotter pin (11), the nut (10), the washer (9) and the bolt (7) from the fishplate (2).
R (c)Carefully release the leaf spring (1) so that it winds anti-clockwise around the spring drum (6).
R (2)Remove the spring pin (5), the pivot pin (4) and the spring drum (6) from the mounting bracket (3).
R (3)Remove the leaf spring (1) from the drum housing (16) as follows:
R NOTE : Drums are identical, therefore only one procedure is described .
R (a)Remove the nuts (22), the bolts (19), the strip (20) and the bracket (21) from the leaf spring (1).
R (b)Pull the leaf spring (1) to its fully extended position and remove the screws (17) and discs (18).
R WARNING : SECURE BOTH ENDS OF THE LEAF SPRING BEFORE REMOVAL OF BOLTS (15)
R BECAUSE THE LEAF SPRING IS UNDER TENSION.
R (c)Remove the nuts (23), the bolts (15) and the leaf spring (1) from the drum housing (16).
R (d)Carefully release the leaf spring (1) so that it winds up automatically.

C. Preparation for Installation
(1)Clean the pivot pin (4), the spring pin (5) and thinly coat with grease



Balance Mechanism
Figure 401



BM6 52 34 41 4 AGM0 01

Leaf Spring
Figure 402

R

(Mat. No. 04-004).

D. Installation

R WARNING : THE LEAF SPRING IS UNDER TENSION. WEAR PROTECTIVE GOGGLES AND
R LEATHER GLOVES.

(Ref. Fig. 401)
(Ref. Fig. 402)

R (1)Install the leaf spring (1) on the drum housing (16) as follows:
R (a)Apply corrosion-preventive paste (Mat. No. 05-002) to the bolts (15) and the screws (17).
R WARNING : SECURE BOTH ENDS OF LEAF SPRING BEFORE INSTALLATION OF BOLTS (15) BECAUSE THE LEAF SPRING IS UNDER TENSION.
R WARNING : THE LEAF SPRING IS UNDER TENSION. WEAR PROTECTIVE GOGGLES AND LEATHER GLOVES.
R (b)Wind up the leaf spring (1) and hold it.
R (c)Position the leaf spring (1) on the drum housing (16) and install the bolts (15) and the nuts (23).
R (d)Position the discs (18) at the drum housing (16) and install the screws (17).
R (e)Mark the screws (17) with a red marking stripe.
R (f)Carefully release the leaf spring (1) so that it winds anticlockwise around the drum housing (16).
R (g)Position the bracket (21) and the strip (20) on the drum housing (16) and install the bolts (19) and the nuts (22).
R (2)Position the spring drum (6) in the mounting bracket (3) and install the pivot pin (4) and the spring pin (5).
R (3)Install the leaf spring (1) on the Bulk door as follows:
R (a)Support the Bulk door in its half-open position.
R (b)Pull the leaf spring (1) from the spring drum (6) and position its end at the fishplate (2).
R (c)Install the bolt (7), the washer (9) and the nut (10).
R (d)Tighten the nut (10) and safety it with the new cotter pin (11).
R (4)Measure the tension of leaf spring (1) with a spring balance. The tension must be between 18.75 and 20.75 daN (42.2 and 46.6 lbf.).

E. Close-Up

(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove support, close and open door several times and make certain door balance mechanism functions correctly.
(3)Close and lock door.
(4)Remove access platform.

BALANCE MECHANISM - INSPECTION/CHECK

NOTE : Should crack formation be suspected during the following inspection/check, an approved nondestructive test must be carried out. If a crack is subsequently proved to exist, a structural repair must be carried out, or the component must be replaced.

1. Inspection/Check

A. Reasons for the Job
(1)Inspection to determine parts are free from wear
(2)Check of force required to operate balance mechanism

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.3 m (7.5 ft.)
(2)	Spring Balance up to 22 daN (49 lbf.)

Referenced Procedures

- 51-73-10, P. Block 801	Repair of Minor Damage
- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings
- 52-34-41, P. Block 401	Balance Mechanism

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)Open door and return exterior handle to CLOSED/LOCKED position.
(c)Disconnect leaf spring from door (Ref. 52-34-41, P. Block 401).
(2)Inspection/Check of Balance Mechanism
(a)Check that balance mechanism and hardware are secured and safetied.
(b)Inspect balance mechanism for:
1 Corrosion. For the removal of corrosion refer to 51-74-10, P. Block 801.
2 Scratches and dents. For the repair of scratches and dents refer 51-73-10, P. Block 801.
3 Satisfactory paint coatings. For the repair of paint coatings refer 51-75-10, P. Block 801.
4 Deformation. Deformed parts must be replaced (Ref. 52-34-41 P. Block 401).
5 Cracks. Cracked components must be replaced (Ref. 52-34-41 P. Block 401).
(3)Check of Force Required to Operate Balance Mechanism
(a)Connect spring balance to leaf spring.
(b)Pull spring balance in direction of leaf spring attach point on door. Make certain that force required, to operate balance mechanism, is between 18,75 and 20,75 daN (42,2 and 46,6 lbf.).
1 Should stated limits be exceeded, leaf spring must be replaced (Ref. 52-34-41, P. Block 401).

D. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Connect leaf spring to door (Ref. 52-34-41, P. Block 401).
(3)Close BULK cargo compartment door.
(4)Remove access platform.

CARGO COMPARTMENT DOORS ELECTRICAL CONTROL SYSTEM - DESCRIPTION AND OPERATION

1. General

The Cargo Compartment Door electrical control system provides electrical power via a number of series connected limit switches to an electro-mechanical operated limit selector valve and hence the door actuators to control the opening and closing of the FWD and AFT Cargo Compartment Doors. With the Cargo Compartment Door unlocked, selection of the door selector switch (control valve) on the control panel to the OPEN/CLOSED position will energize the circuit with 28VDC which is also routed to the Yellow Hydraulic system pump contactor. The hydraulic electro-mechanical selector valve is energized through contacts of the series connected door sill latches and the door locking shaft limit switch to operate the door actuators and the door will open. When the door is fully open and locked, the door actuator switch contacts will close to illuminate the green indicator lamp.

The door sill latches must be lowered when cargo is being loaded or unloaded which involves the actuation of limit switches within the door control system (Ref. AMM 25-52-00) to open the contacts of the series connected limit switches. This, therefore, serves as a safety device to prevent the doors being closed when the door sill latches are lowered by disconnecting the 28VDC power supply to the electro-mechanical selector valve.

The door is also prevented from closing by the door locking shaft limit switch if the compartment door operating handle is not in the fully unlocked position.

2. Component Location
(Ref. Fig. 001)
(Ref. Fig. 002)
(Ref. Fig. 003)

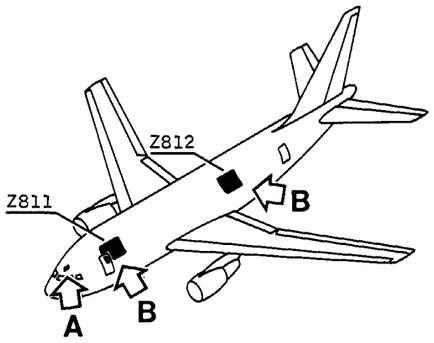
FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
3MJ	LIGHT-INDICATOR		122	122CR	52-35-12
4MJ	LIGHT-INDICATOR		152	677DR	52-35-12
7MJ	ACTUATOR-DOOR		132		52-33-18
8MJ	ACTUATOR-DOOR		152		52-33-18
9MJ	VALVE-ELECTRO-MECHANICAL SELECTOR		148		52-33-12
10MJ	VALVE-ELECTRO-MECHANICAL SELECTOR		148		52-33-12
11MJ-1	SWITCH-LIMIT	922 VU-1	134		25-52-00
11MJ-2	SWITCH-LIMIT	922 VU-2	134		25-52-00
12MJ-1	SWITCH-LIMIT	924 VU-1	134		25-52-00
12MJ-2	SWITCH-LIMIT	924 VU-2	134		25-52-00
12MJ-3	SWITCH-LIMIT	924 VU-2	134		25-52-00
12MJ-4	SWITCH-LIMIT	924 VU-3	154		25-52-00
15MJ	VALVE-CONTROL		132		52-33-15
16MJ	VALVE-CONTROL		152		52-33-15
17MJ	DIODE		122		
18MJ	DIODE		122		
21MJ	SWITCH-LIMIT			811	52-35-13
22MJ	SWITCH-LIMIT			812	52-35-13

3. Description
The series connected limit switches which control the operation of the electro-mechanical selector valves are operated as follows:

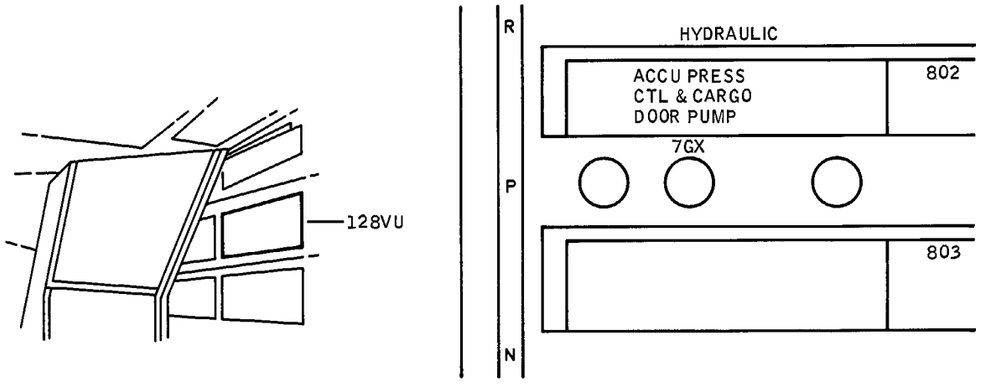
A. 11MJ-1 and 11MJ-2 by the YZ-latches of the manual door sill latches of the FWD Cargo Compartment 12MJ-1 and 12MJ-2 by the YZ-latches of the automatic door sill latches of the FWD Cargo Compartment.

B. 12MJ-3 and 12MJ-4 by the YZ-latches of the automatic door sill latches of the AFT Cargo Compartment.

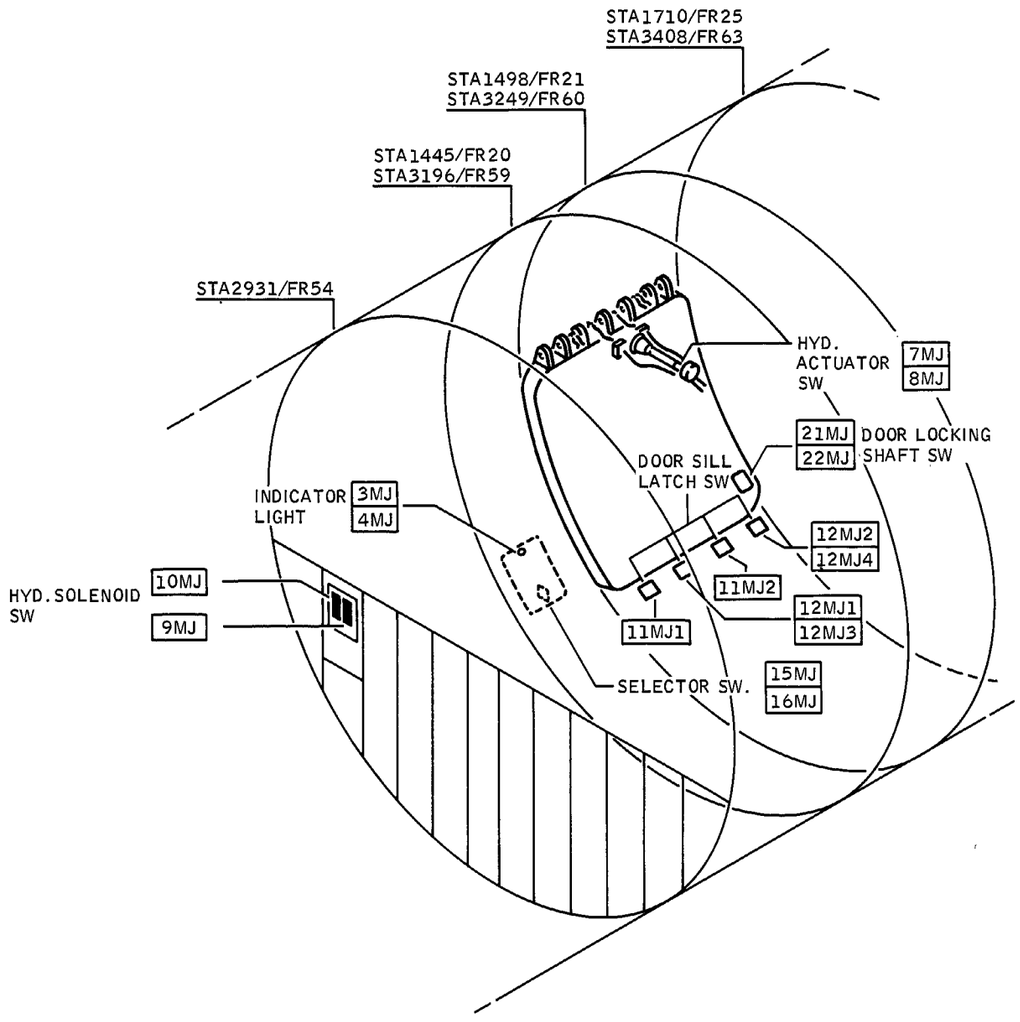
Door locking shaft limit switches 21MJ and 22MJ are installed in the FWD and AFT Cargo Compartment Doors respectively and are operated by the door locking mechanism.
Limit switches 7MJ (FWD) and 8MJ (AFT) are installed in the door actuator mechanism and close to illuminate the green indicator lamps 3MJ (FWD) and 4MJ (AFT) when the Cargo Compartment Door is fully open and locked.



A



B



NOTE: AFT DOOR SHOWN
FWD DOOR SIMILAR

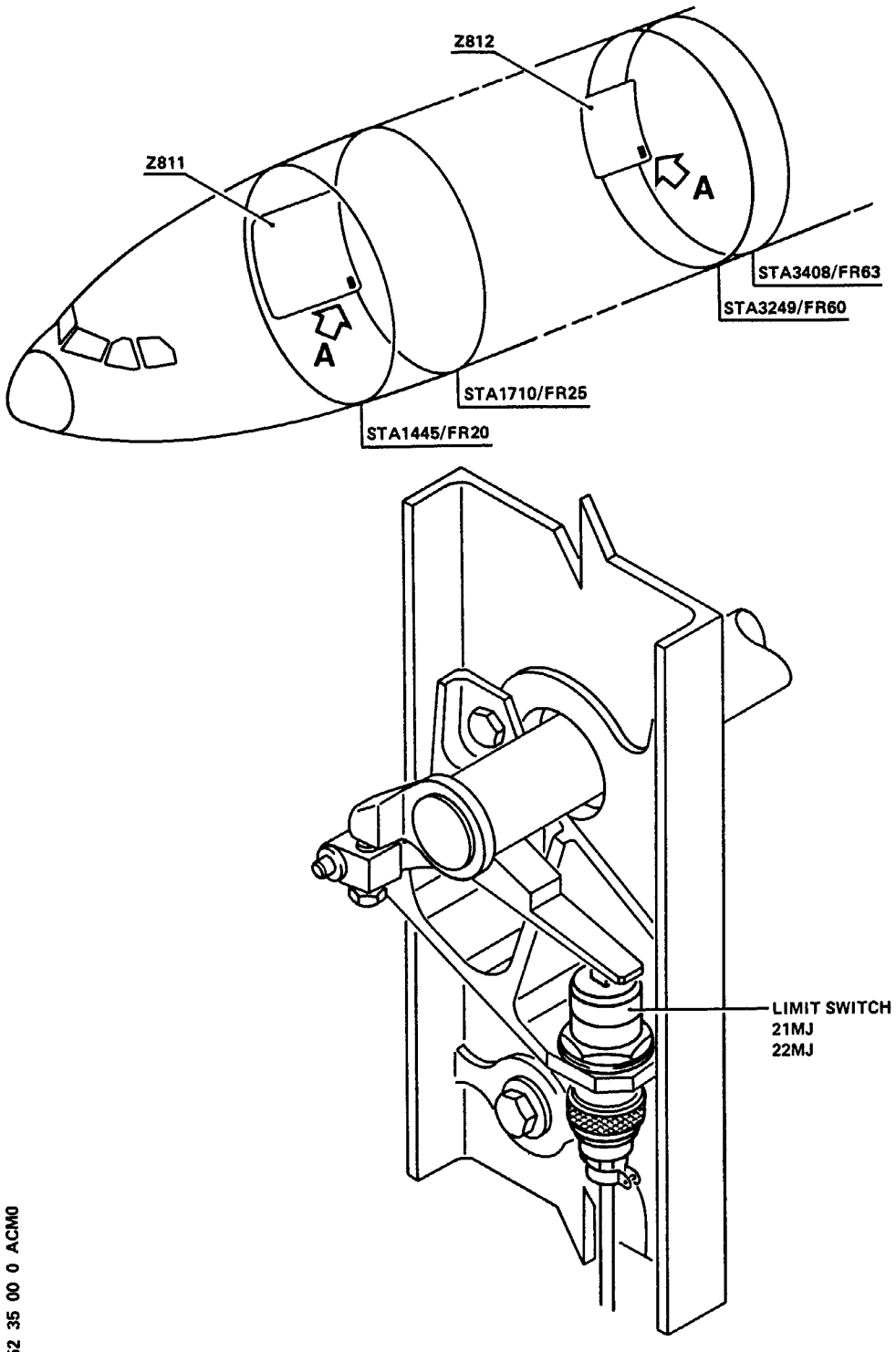
BM3 52 35 00 0 AAM0-15

Cargo Door Electrical Control System
Component Location
Figure 001

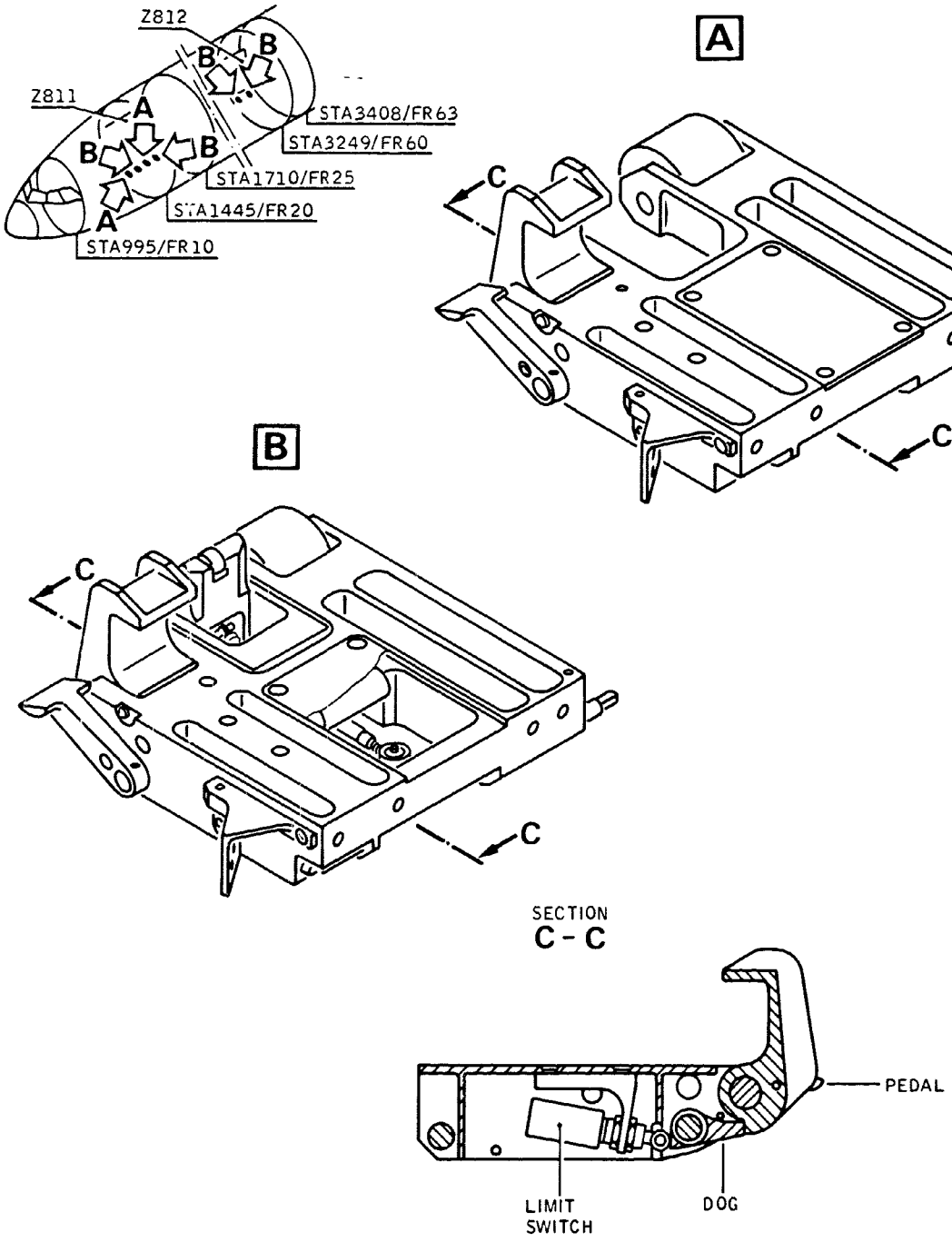
EFFECTIVITY: ALL

PIA

Printed in France



Switches - Door Mounted
Figure 002



BM3 52 35 00 0 AEMO

Switches - Door Sill Latches
Figure 003

The electro-mechanical selector valves 9MJ (FWD) and 10MJ (AFT) are located in the RH main wheel compartment and when energized, extend and retract the door actuators to open and close the Cargo Compartment Door.

4. Component Description

A. Circuit Breaker (7GX)
Rated at 3A. When closed routes 28VDC from FLT/GND busbar 601PP to energize the system.

B. Indicator Light (3MJ, 4MJ)
Switched on (green) when the contacts of the door actuator limit switch close after the door is fully opened and locked. Lamp has push-to-test facility.

C. Door Actuator (7MJ, 8MJ)
Limit switch contacts close when the door is fully open and locked to illuminate the green indicator light.

D. Electro-Mechanical Selector Valve (9MJ, 10MJ)
Electrically operated by 28VDC, routed through the series connected door sill latch and door locking shaft limit switches, to extend and retract the door actuator to open and close the door.

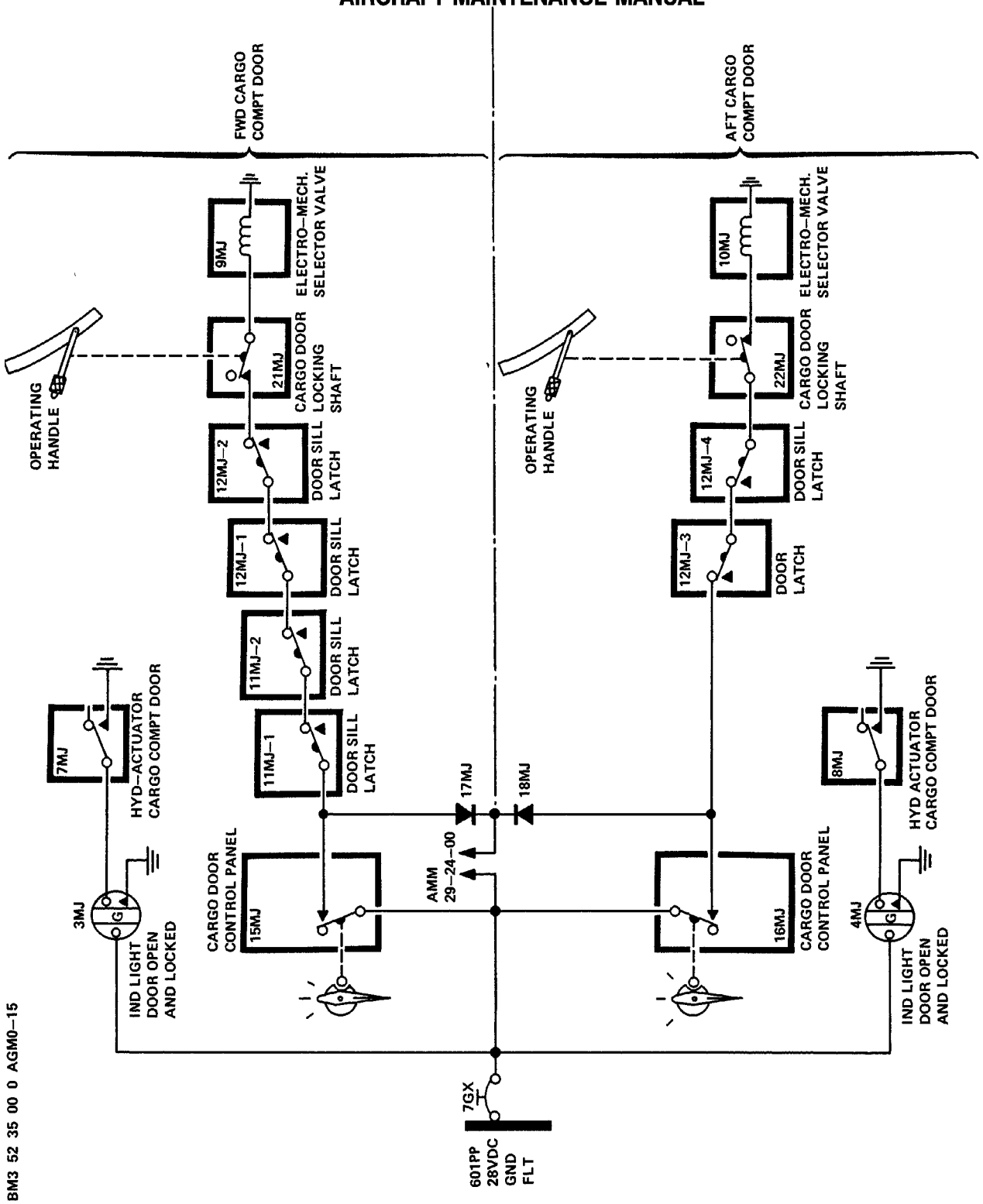
E. Control Valve (15MJ, 16MJ)
Operated by the door limit switch, when set to OPEN or CLOSED position routes 28VDC to the series-connected limit switches and to the Yellow Hydraulic System pump contactor.

F. Limit Switch (11MJ-2, 12MJ-1, 12MJ-2, 12MJ-3, 12MJ-4)
Door sill latch limit switch. Contacts connected in series when the latches are raised to route 28VDC to energize the electro-mechanical selector valve.

G. Limit Switch (21MJ, 22MJ)
Door locking shaft limit switch the contacts of which are connected in series with the door sill latch limit switches. Contacts are closed when the door operating handle is in the fully unlocked position.

5. Operation
(Ref. Fig. 004)
NOTE : Components identifications in parenthesis are for FWD cargo door electrical control system. FWD Cargo Compartment Door has one additional door sill latch (11MJ).

(1)Opening - FWD/AFT Cargo Compartment Door
Fully pulling out operating handle makes door locking shaft limit switch contacts 22MJ (21MJ) removing inhibit from electro-mechanical selector valve 10MJ (9MJ). Manually operating control valve 16MJ (15MJ) starts YELLOW system pump motor 25GX through circuit breaker 7GX, 601PP FLT/GND busbar, diode 18MJ (17MJ) and contactor 24GX. Electro-mechanical selector



Electrical Control System - Schematic Diagram
Figure 004

valve 10MJ (9MJ) energizes, pressurizing door actuator. When door is fully open, limit switch 8MJ (7MJ) makes circuit to illuminate green lamp 4MJ (3MJ) "DOOR OPEN AND LOCKED". Safety procedure during cargo loading requires door sill latches to be lowered, opening circuit to electro-selector valve 10MJ (9MJ) and preventing door closure.

(2)Closing - FWD/AFT Cargo Compartment Door
With door sill latches raised and control valve 16MJ (15MJ) set to closed position, YELLOW system pump motor 25GX starts through circuit breaker 7GX, 601PP FLT/GND busbar, diode 18MJ (17MJ) and contactor 24GX. Electro-mechanical selector valve 10MJ (9MJ) energizes, pressurizing door actuator to close door and open limit switch 7MJ (8MJ) extinguishing indicator light 4MJ (3MJ). Stowing locking handle opens limit switch 21MJ (22MJ) inhibiting further solenoid operation.

CARGO COMPARTMENT DOORS - ELECTRICAL CONTROL SYSTEM ADJUSTMENT/TEST

1. General

NOTE : The procedures for the adjustment of limit switches in the FWD and AFT Cargo Compartment Door electrical control system are given in 52-35-13, P. Block 501.

2. Operational Test

A. Reason for the Job

(1)To make certain that interlocks in the Cargo Compartment Door electrical control systems are functioning correctly.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.6 m (8.5 ft.)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
R - 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-31-11, P. Block 501	FWD Cargo Compartment Door
- 52-32-11, P. Block 501	AFT Cargo Compartment Door

C. Procedure

(1)Job Set-Up

(a)Position access platform.

(b)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
128VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR PUMP	7GX	P70
101VU	ELEC HYD PUMP	23GX	GEN2/B5

(c)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(2)Test

(Ref. Fig. 501)

(a)FWD and AFT Cargo Compartment Doors

ACTION	RESULT
1. Open FWD/AFT Cargo Compartment Door (Ref. 52-30-00, P. Block 1).	On selector panel - Green indicator light comes on when door is locked open

CAUTION : DURING THE FOLLOWING PROCEDURES SHOULD THE CARGO DOOR START TO CLOSE, IMMEDIATELY SET SELECTOR LEVER TO STOP AND RECTIFY FAULT BEFORE PROCEEDING WITH TEST (REF. 52-31-11, AND 52-32-11,

ACTION	RESULT
P. BLOCK 501).	
2. On door sill latches - Manually lower Z-latch in turn	
On selector panel - set selector lever to CLOSE	Door must not close
3. On door sill latches - Manually raise Z-latch in turn	
4. Repeat steps 2. and 3. for remaining door sill latches in turn	
5. Close FWD/AFT Cargo Compartment Door	On selector panel - Green indicator light goes off when door is unlocked

3. Functional Test

A. Reason for the Job
(1)To make certain that interlocks in the Cargo Compartment Door electrical control system are functioning correctly.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.6 m (8.5 ft.)

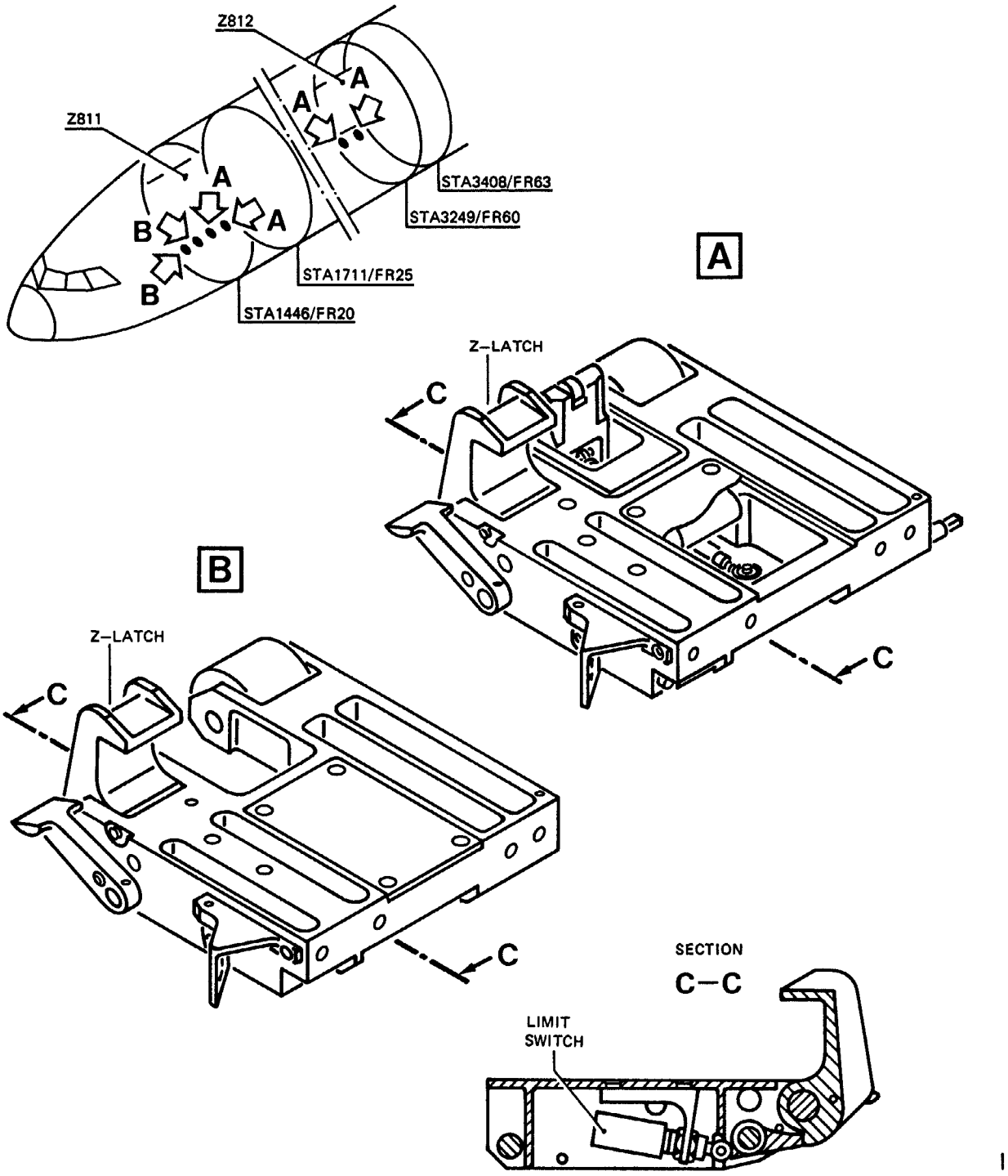
Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-31-11, P. Block 501	FWD Cargo Compartment Door
- 52-32-11, P. Block 501	AFT Cargo Compartment Door

C. Procedure
(1)Job Set Up
(a)Position access platform.
(b)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
128VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR PUMP	7GX	P70
101VU	ELEC HYD PUMP	23GX	GEN2/B5

(c)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).



Z-Latch of Door Sill Latches
Figure 501

(d)Make certain that Cargo Compartment Door opening area is clear of all obstructions.

(2)Test

(a)FWD and AFT Cargo Compartment Doors

Initial conditions:

- FWD and AFT Cargo Compartment Doors opened
- Green indicator light at door control panel illuminated.

CAUTION : IF, IN THIS OR SUBSEQUENT STEPS, THE CARGO DOOR SHOULD START TO CLOSE, IMMEDIATELY SET SELECTOR TO OPEN UNTIL THE GREEN INDICATING LIGHT COMES ON. RECTIFY FAULT BEFORE PROCEEDING WITH TEST (REF. 52-31-11, P. BLOCK 501 AND REF. 52-32-11, P. BLOCK 501).

ACTION	RESULT
1. On door sill latches - Manually lower each Z-latch in turn. When Z-latch is lowered, operate door selector to CLOSE	Door must not close
2. On door sill latches - Manually raise each Z-latch in turn	
3. On Cargo Compartment Door control panel - Operate selector lever to partially close Cargo Compartment Door, sufficient to gain access to door operating handle	
4. On Cargo Compartment Door - Lock door operating handle into recess of Cargo Compartment Door	
5. On Cargo Compartment Door control panel - Set selector to CLOSE	Door must not close
6. On Cargo Compartment Door - Unlock operating handle and pull down to stop	

(3)Close-Up

(a)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(b)Make certain that Z-latch of door sill latches are raised.

(c)Close cargo compartment door.

(d)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

(e)Remove access platform.

INDICATOR LIGHT - REMOVAL/INSTALLATION

1. Reason for the Job
   Removal and installation of FWD and AFT Cargo Compartment Door selector panel indicator light

2. Equipment and Materials

	ITEM	DESIGNATION
	A.	Access Platform, 2.7m (9 ft.)
R	B.	Indicator Lamp (ASN-E00029)
	C.	Circuit Breaker Safety Clips and Tags
R	D.	Soldering Iron
R	E. 98F52308330000	Spanner-Wrench
R	F. Material No. 09-016	Sealant
R	G. Material No. 11-002	Cleaning Agent

Referenced Procedures

	- 24-41-00, P. Block 301	AC External Power Control
R	- 52-30-00, P. Block 1	Cargo Compartment Door

3. Procedure

A. Job Set-Up

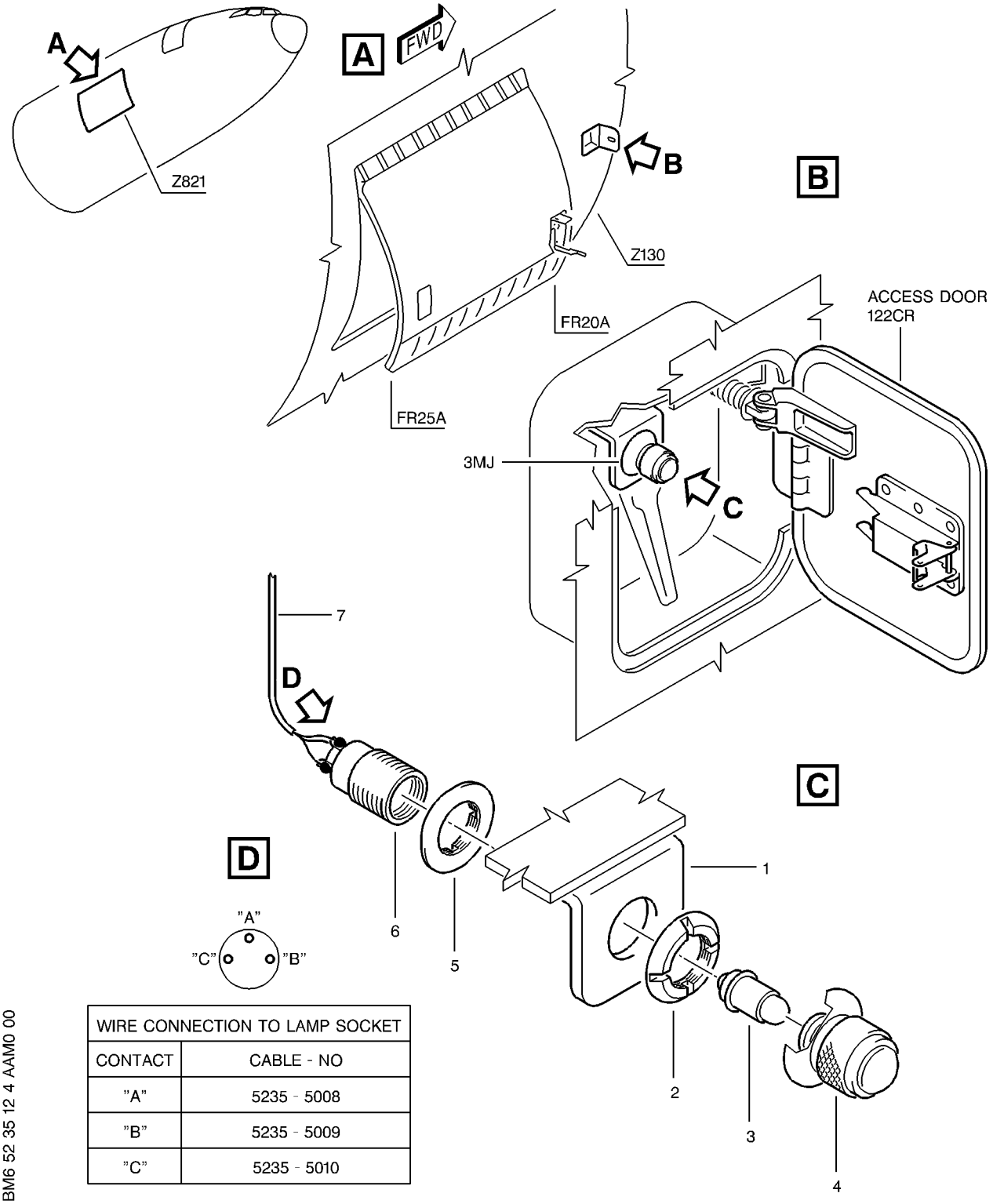
R (1)Position access platform.
R (2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (3)Make certain that electronics rack ventilation is correct.
R (4)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC-HYD PUMP	23GX	GEN2/B08

R (5)Open access door 122CR (FWD) and/or 152AR (AFT).

B. Removal

R (Ref. Fig. 401)
R (Ref. Fig. 402)
R (1)Remove the lamp (3) from the lamp socket (6) as follows:
R (a)Turn the lamp cover (4) and remove it from the lamp socket (6).
R (b)Remove and discard the lamp (3) from the lamp socket (6).
R (2)Remove lamp socket (6) from the mounting bracket (1) as follows:
R (a)Remove the castle nut (2) from the lamp socket (6) with the spanner-wrench (98F52308330000).
R (b)Remove the lamp socket (6) with the castle nut (5) from the mounting bracket (1).
R (c)Make a mark on the wire harness (7) to identify the individual wires.

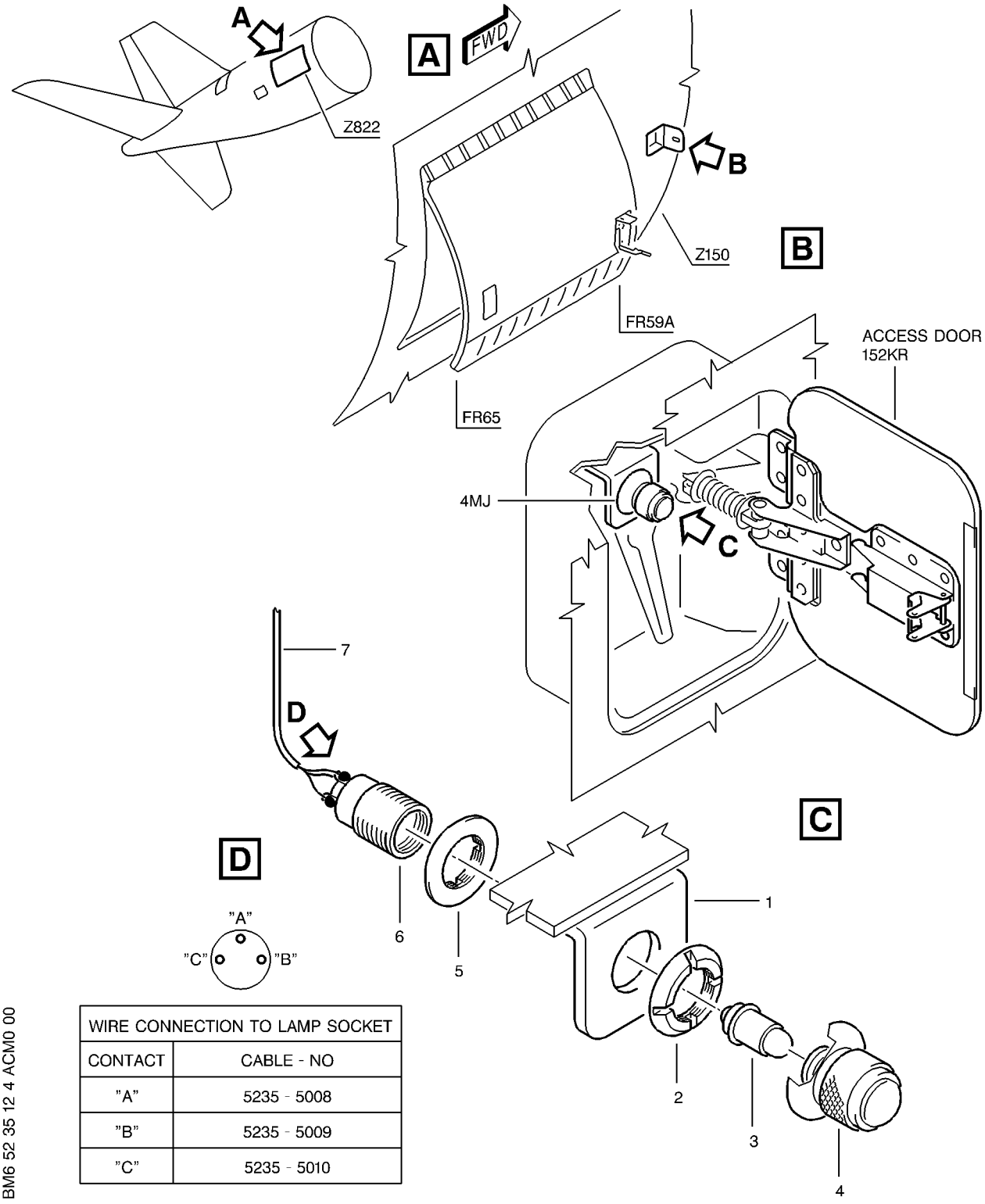


WIRE CONNECTION TO LAMP SOCKET	
CONTACT	CABLE - NO
"A"	5235 - 5008
"B"	5235 - 5009
"C"	5235 - 5010

BM6 52 35 12 4 AAM0 00

Indicator Light
Figure 401

R



BM6 52 35 12 4 ACM0 00

WIRE CONNECTION TO LAMP SOCKET	
CONTACT	CABLE - NO
"A"	5235 - 5008
"B"	5235 - 5009
"C"	5235 - 5010

Indicator Light
Figure 402

R

R (d)Disconnect the wire harness (7) from the soldered terminals of the
R lamp socket (6) with a soldering iron.
R (e)Disconnect the wire harness (7) from the soldered terminals of the
R lamp sockets (6) with a soldered iron.

R C. Preparation of Replacement Component

R WARNING : USE SOLVENTS/CLEANING AGENTS, SEALANTS AND OTHER SPECIAL MATERIALS
R ONLY WITH A GOOD SUPPLY OF AIR.
R OBEY THE MANUFACTURERS INSTRUCTIONS.
R PUT ON PROTECTIVE CLOTHING.
R DO NOT GET THEM IN YOUR MOUTH.
R DO NOT SMOKE.
R DO NOT BREATHE THE GAS.
R THESE MATERIALS ARE POISONOUS, FLAMMABLE AND SKIN IRRITANT.
R GET MEDICAL HELP IF YOUR SKIN OR EYES BECOME IRRITATED.

R (1)Clean the mating surfaces of the mounting bracket (1) and the castle
R nuts (5) and (2) with cleaning agents (Mat. No. 11-002).
R (2)Apply a layer of sealant (Mat. No. 09-016) to the mating surfaces of the
R castle nuts (5) and (2).
R (3)Make sure that the electrical connectors are clean and in the correct
R condition.

R D. Installation
R (1)Install the lamp socket (6) in the mounting bracket (1) as follows:
R (a)Connect the wire harness (7) with a soldering iron to the soldered
R terminals of the lamp socket (6).
R (b)Put the lamp socket (6) with the castle nut (5) in position in the
R mounting bracket (1).
R (c)Install the castle nut (2) on the lamp socket (6).
R (d)TORQUE the castle nut (2) with the spanner-wrench (98F52308330000) to
R between 0.19 m.daN (16.81 lbf.in.) and 0.21 m.daN (18.58 lbf.in.).
R (2)Install the lamp (3) in the lamp socket (6) as follows:
R (a)Make sure that the contact area of the lamp socket (6) is in a good
R condition.
R (b)Put the lamp (3) into the lamp socket (6).
R (c)Install the lamp cover (4) on the lamp socket (6).
R (d)Make sure that the rubber cap of the lamp cover (4) covers the
R castle nut (2).

R E. Test
R (1)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
R (2)Push the lamp cover and make sure that the applicable indicator
R light comes on.
R (3)Unlock and open relevant cargo compartment door and make sure that
R indicator lamp is illuminated green (Ref. 52-30-00, P. Block 1).

R F. Close-Up
R (1)Make certain that work area is clean and clear of tools and
R miscellaneous items of equipment.

R (2)Close relevant cargo compartment door (Ref. 52-30-00, P. Block 1).
R (3)De-energize the aircraft electrical network and disconnect electrical
R ground power unit (Ref. 24-41-00, P. Block 301).
R (4)Close access door 122CR (FWD) and/or 152AR (AFT).
R (5)Remove access platform.

DOOR CONTROL SWITCH - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR CARGO COMPARTMENT DOORS (REF. 52-30-00, P. BLOCK 301).

1. Reason for the Job
   Removal/Installation of the Limit Switches at the Electrical Door Control System installed in the door sill latches and at the door locking shaft of the FWD and AFT cargo compartment doors.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Adjustable Access Platform, 2.5 to 5 m (8.20 to 16.40 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.025 in.)
D.	Blanking Caps
E.	Continuity Tester

Referenced Procedures

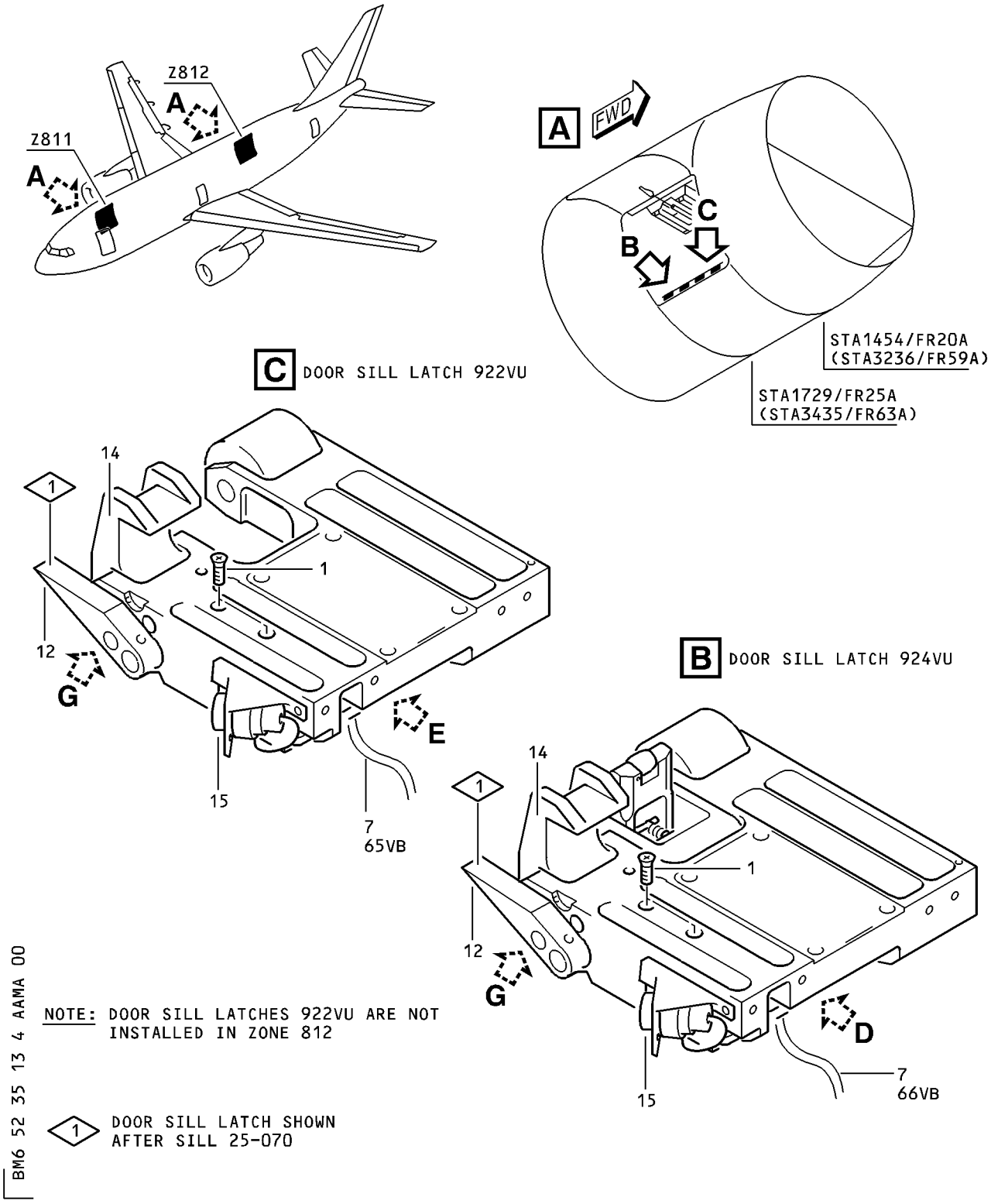
- 24-41-00, P. Block 301	AC External Power Control
- 25-52-41, P. Block 401	Door Sill Latch
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-35-00, P. Block 501	Cargo Compartment Doors Electrical Control System
- 52-35-13, P. Block 501	Door Locking Control Switch

3. Procedure

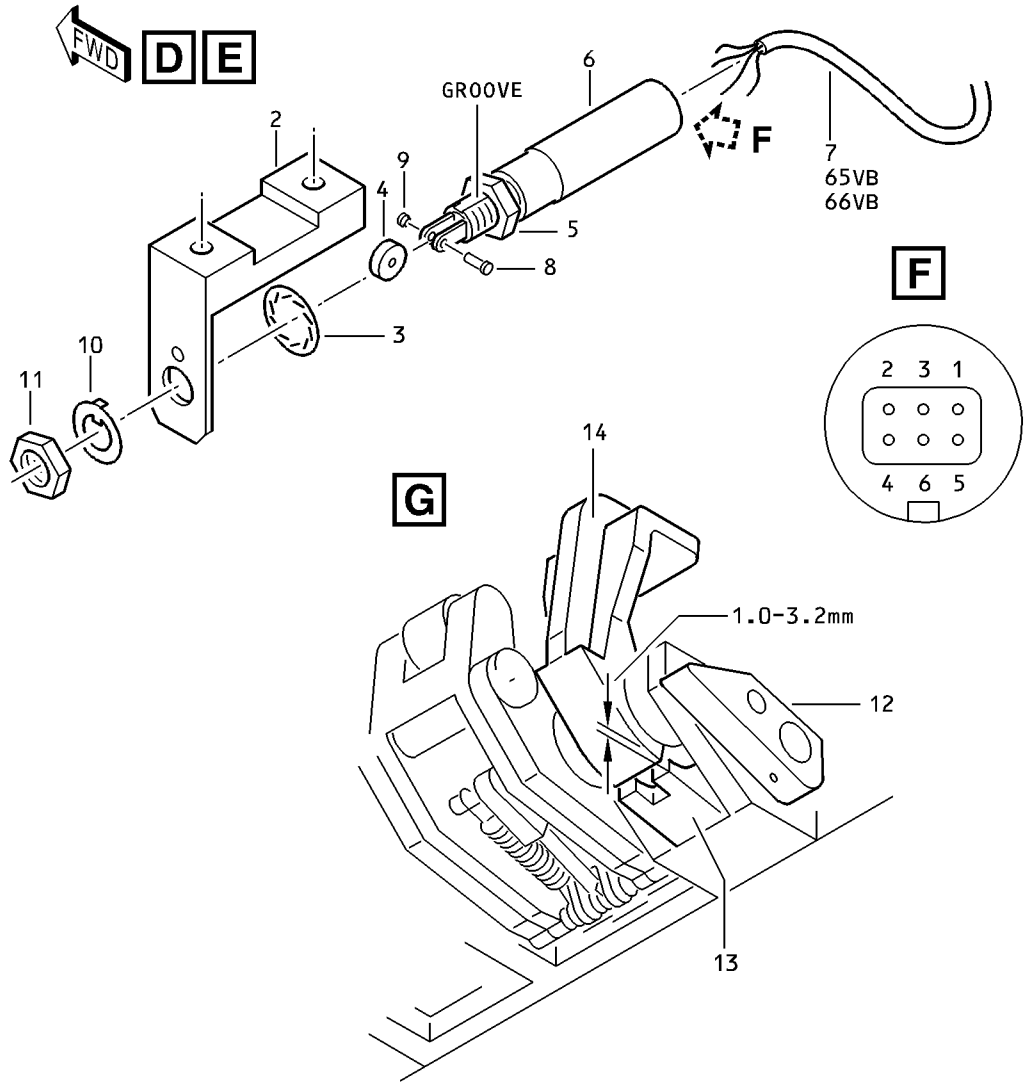
A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
101VU	ELEC HYD PUMP	23GX	GEN2/B08
133VU	HYDRAULIC/ACCU PRESS CTL AND CARGO DOOR PUMP	7GX	333/T51

B. Removal
(1)Limit Switches 11MJ and 12MJ of the Door Sill Latches
R (Ref. Fig. 401)
R (Ref. Fig. 401)



Limit Switches 11MJ and 12MJ
(Sheet 1 of 2)
Figure 401



WIRE CONNECTION TO LIMIT SWITCH CONTACTS

CONTACT	CABLE
1	5235-0014
2	5235-0015
3	UNUSED
4	2552-0089
5	UNUSED
6	2552-0088

DOOR SILL LATCH 922VU

WIRE CONNECTION TO LIMIT SWITCH CONTACTS

CONTACT	CABLE
1	5235-0016
2	5235-0017
3	UNUSED
4	2552-0091
5	UNUSED
6	2552-0090

DOOR SILL LATCH 924VU

BM6 52 35 13 4 AAMM 00

Limit Switches 11MJ and 12MJ
(Sheet 2 of 2)
Figure 401

R (a)Open the FWD or AFT cargo compartment door as required (Ref. 52-30-00, P. Block 1).
R (b)Safety the opened FWD or AFT cargo compartment door with the door actuator safety lock (Ref. 52-30-00, P. Block 301).
R (c)Remove the applicable door sill latch (Ref. 25-52-41, P. Block 401).
R (d)Remove the screws (1) and the support bracket (2) from the applicable door sill latch.
R (e)Disconnect the wiring harness (7) from the limit switch (6) and put blanking caps on the contacts.

R NOTE : Record wiring connections to facilitate installation.

R (f)Cut and remove lockwire from the locknut (11).
R (g)Remove the locknut (11) and the safety washer (10) from the limit switch (6).
R (h)Remove the limit switch (6) with the serrated washer (3) and the adjustment nut (5) from the support bracket (2).
R (j)Measure and record the distance between the face of adjustment nut (5) and switch roller (4).

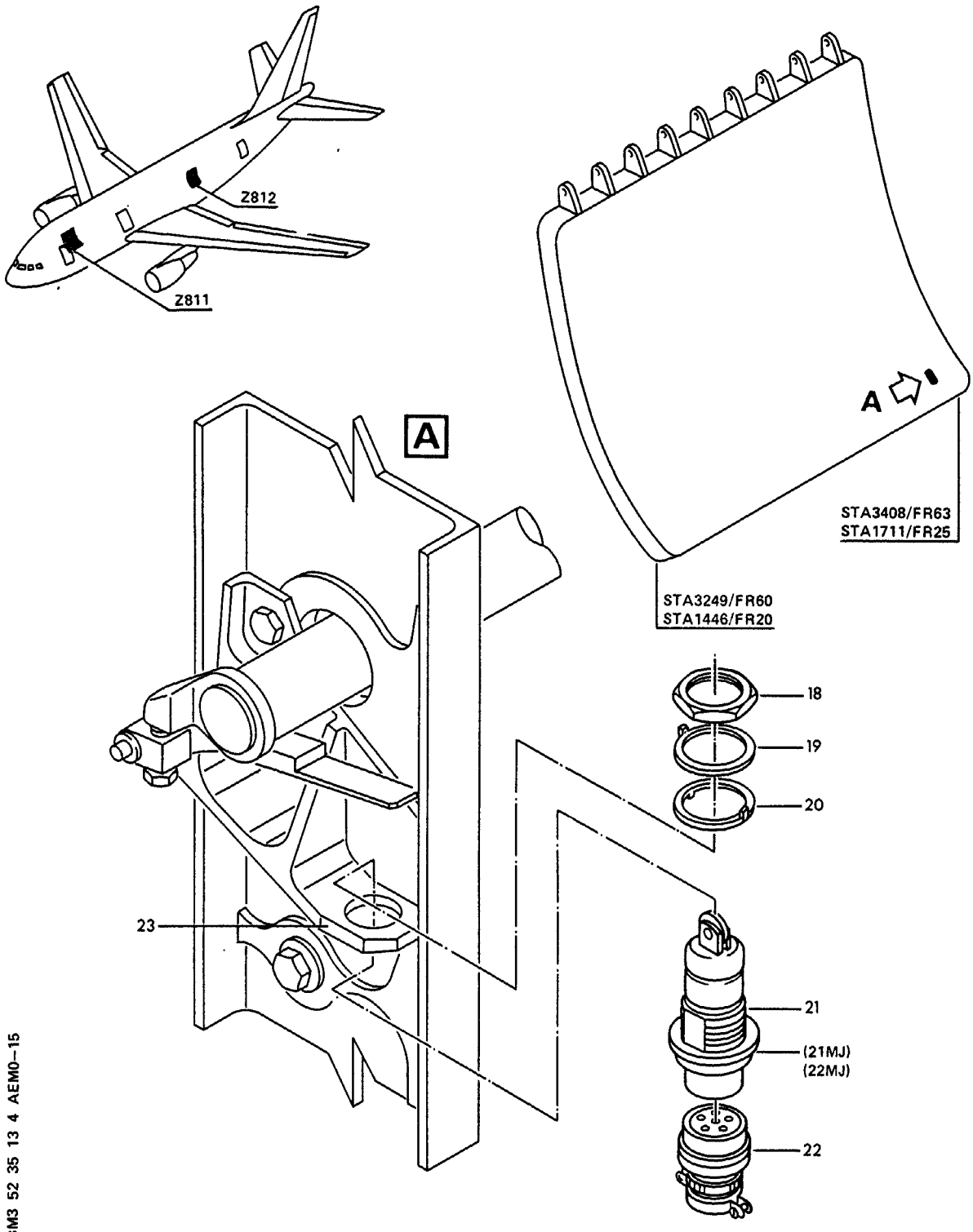
R (2)Limit Switches 21MJ and 22MJ at the Locking Shaft

(Ref. Fig. 402)
R (a)Position the access platform below the closed FWD or AFT cargo compartment door.
R (b)Remove the access cover 811BR or 812BR from the applicable cargo compartment door as required.
R (c)Disconnect the electrical connector (22) from the limit switch (21) and put blanking caps on the opened ends.
R (d)Cut and remove the lockwire from the nut (18).
R (e)Remove the nut (18), the lockwasher (19) and the locating washer (20), from the limit switch (21).
R (f)Remove the limit switch (21) from the mounting bracket (23).

C. Installation

R (1)Limit Switches 11MJ and 12MJ of the Door Sill Latches (Ref. Fig. 401)
R (a)Make sure that the roller (4) of the replacement limit switch (6) is in line with the groove.
R (b)If not, correct the position of the roller (4) as follows:
R 1 Remove the nut (9) and the bolt (8) from the fork-end of limit switch (6) and disengage the roller (4).
R 2 Push the fork-end carefully into the switch housing until a resistance is felt and hold.
R 3 Turn the fork-end to 90 degrees and release it.
R 4 Assemble the roller (4) to the fork-end and attach it with the bolt (8) and the nut (9).
R (c)Make sure the distance between the adjustment nut (5) and the face of the roller (4) is the same as recorded previously.
R NOTE : If necessary, turn the adjustment nut (5) as required.

R (d)Position the limit switch (6) together with the adjustment nut (5) and the serrated washer (3) on the support bracket (2).



Limit Switches 21MJ and 22MJ
Figure 402

R

R (e)Install the safety washer (10) and the locknut (11) on the limit switch (6).

R NOTE : Make sure that the outer tab of the safety washer (10) engages with the attachment hole of the support bracket (2).

R (f)Tighten the locknut (11) to attach the limit switch (6) on the support bracket (2).

R (g)Position the support bracket (2) on the applicable limit switch (6) and attach it with the screws (1).

R NOTE : The roller (4) of the limit switch (6) must touch the back of the pedal (12) which must stay in the upper position.

R (h)Remove the blanking caps and connect the wires of the wiring harness (7) to the limit switch (6).

R NOTE : Make sure that the contacts, which are not used, remain covered with the blanking caps.

R (j)Check the limit switch (6) as follows:

R 1 Connect the continuity tester to the pins A and B of the receptacle (15) at the applicable door sill latch.

R NOTE : The tester shall indicate "continuity".

R 2 Slowly press the pedal (12) until the continuity tester shows an "open circuit" and hold it.

R 3 Measure the offset between the bottom of the toggle lever (13) and the bottom of the YZ latch (14).

R NOTE : The offset shall be between 1.0 mm and 3.2 mm (0.04 in. and 0.13 in.).

R 4 Remove the continuity tester and connect it to the pins C and D of the receptacle (15).

R NOTE : The tester shall indicate an "open circuit" when the YZ latch (14) is raised.

R 5 Slowly press the pedal (12) until the continuity tester shows "continuity" and hold it.

R 6 Measure the offset between the bottom of the toggle lever (13) and the bottom of the YZ latch (14).

R NOTE : The offset shall be between 1.0 mm and 3.2 mm (0.04 in. and 0.13 in.).

R 7 If the offset is out of tolerance, adjust the position of the limit switch (6) by turning the adjustment nut (5).

R 8 Remove the continuity tester from the receptacle (15).

R (k)Install the applicable door sill latch (Ref. 25-52-41, P. Block 401).
R (l)Remove the actuator safety lock (Ref. 52-30-00, P. Block 301) and
R close the FWD or AFT cargo compartment door (Ref. 52-30-00,
R P. Block 1).

R (2)Limit Switches 21MJ and 22MJ at the Locking Shaft (Ref. Fig. 402)
R (a)Position the limit switch (21) in mounting bracket (23) at
R STA1711/FR25 (STA4150/FR63).
R (b)Install the locating washer (20), the lockwasher (19) and the nut (18),
R on the limit switch (21).
R (c)Tighten the nut (18) and safety it with lockwire.
R (d)Remove the blanking caps and connect the electrical connector (22) to
R the limit switch (21).
R (e)Carry out an adjustment of the limit switches 21MJ and 22MJ
R (Ref. 52-35-13, P. Block 501).
R (f)Install the access cover 811BR or 812BR on the closed FWD or AFT cargo
R compartment door and remove the access platform.

D. Test
(1)Carry out test of cargo compartment door electrical control system
(Ref. 52-35-00, P. Block 501).

E. Close-Up
(1)Make certain that work area is clean and clear of tools and
miscellaneous items of equipment.
(2)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(3)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(4)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00,
P. Block 1).
(5)Refit access covers 811BR (FWD), 812BR (AFT).
(6)De-energize the aircraft electrical network and disconnect electrical
ground power unit (Ref. 24-41-00, P. Block 301).
(7)Remove access platform.

DOOR CONTROL SWITCH - ADJUSTMENT/TEST

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR CARGO COMPARTMENT DOORS (REF. 52-30-00, P. BLOCK 301).

1. Reason for the Job

A. Adjustment/test of the Locking Shaft Switch 21MJ, 22MJ installed in the FWD and AFT Cargo Compartment Doors respectively.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Adjustable Access Platform, 2.5 to 5 m (8.20 to 16.40 ft.)
B.	Lockwire, Corrosion-Resistant Steel, Dia. 0.8 mm (0.032 in.)
C.	Continuity Tester

Referenced Procedures

- 25-23-11, P. Block 401	Ceiling Panels
- 25-23-21, P. Block 401	Upper Sidewall Panels
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-30-00, P. Block 301	Cargo Compartment Doors
- 52-30-21, P. Block 501	FWD, AFT Cargo Door Locking Mechanism
- 52-35-00, P. Block 501	Cargo Compartment Doors Electrical Control System

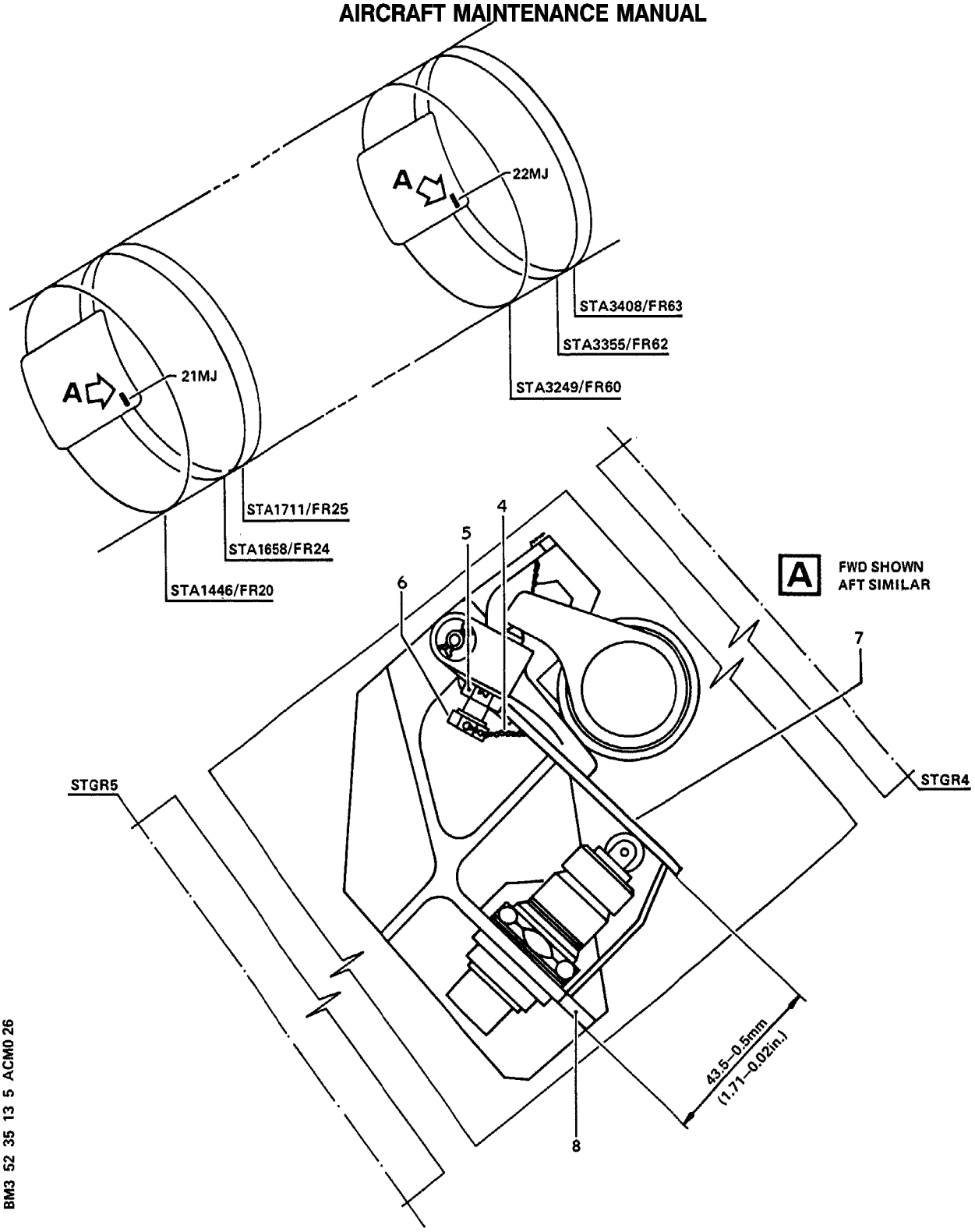
3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
133VU	ACCU PRESS CTL & CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B08

(3)Remove access covers 811BR (FWD), 812BR (AFT).

B. Adjustment
R (1)Door Locking Shaft Switches 21MJ, 22MJ.
(Ref. Fig. 501)
R (a)Make sure that the FWD and AFT Cargo Compartment Doors and their
R locking mechanisms are correctly adjusted (Ref. 52-30-21,
R P. Block 501).
R (b)Cut and remove lockwire (4) from adjusting screw (6).
R (c)Loosen the locknut (5) and turn adjusting screw (6) until end of
R screw is flush with lever (7).
R (d)Slowly move the door operating handle fully down.



FWD and AFT Cargo Compartment Doors -
Door Locking Shaft Switches 21MJ, 22MJ
Figure 501

R (e)Turn adjusting screw (6) in until gap 'A' between lever (7) and
R rear face of switch mounting bracket (8) is 43.0 mm (1.69 in.) and
R 43.5 mm (1.71 in.).
R (f)Tighten locknut (5).
R (g)Operate door control handle to closed and locked and then back to
R fully open position. Recheck clearance measurement of step (e).
R (h)Repeat steps (c) thru (g) until required clearance is obtained.
R (i)Secure adjusting screw (6) and lockwire (4).

C. Test

(1)Carry out functional test of FWD and AFT Cargo Compartment Door electrical control system (Ref. 52-35-00, P. Block 501).

D. Close-Up

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove safety clips and tags and close circuit breakers 7GX and 23GX.
(3)Refit access panels 811BR (FWD), 812BR (AFT).
(4)Remove access platform.

SERVICE DOORS - DESCRIPTION AND OPERATION

1. General

These external doors give access for maintenance and/or servicing of systems and components.

The use and position of the doors is indicated by their designation and zone (Ref. 06-21-00, and subsequent).

Additional doors and covers are provided for inspection of the structure, etc.

Information concerning access doors is contained in chapter 52-41-00 and service doors in chapter 52-42-00.

ACCESS DOORS - DESCRIPTION AND OPERATION

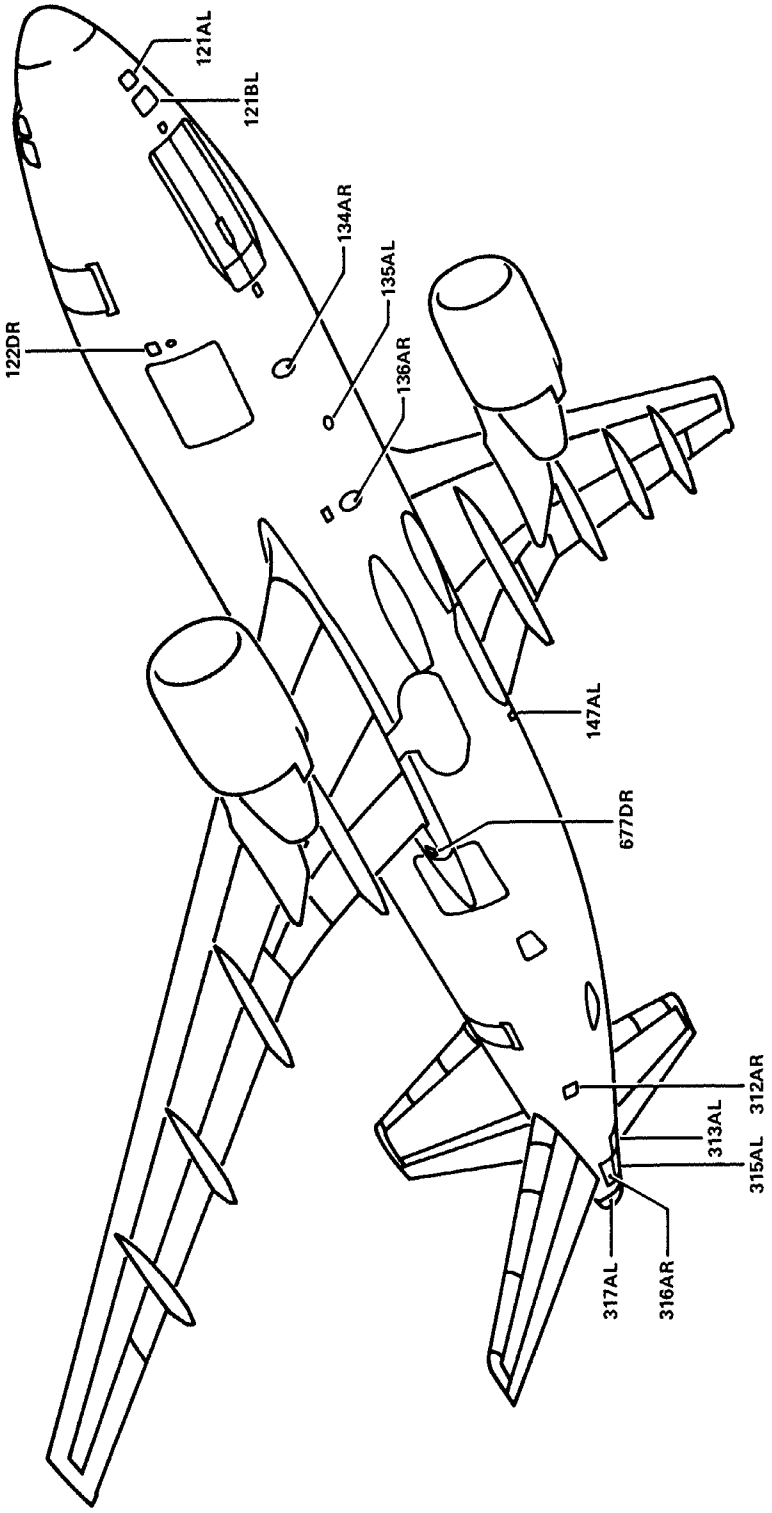
1. General

Access doors are provided at various locations in the airframe structure to provide access for maintenance of systems and equipment.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
121AL	DOOR-GLIDE ANTENNAS ACCESS		121		52-41-00
121BL	DOOR-AVIONICS COMPT. ACCESS		121		52-41-00
122DR	DOOR-CONTROL PANEL CLS		122		52-41-00
135AL	DOOR-FWD CARGO COMPARTMENT DRAIN SYSTEM		133		52-41-00
134AR	DOOR-AIR FAN AND AIR CONDITIONING CONTROL VALVE ACCESS		134		52-41-00
136AR	DOOR-AIR FAN AND AIR CONDITIONING CONTROL VALVE ACCESS		136		52-41-00
147AL	DOOR-GREEN HYDR. SYSTEM GROUND CONNECTOR ACCESS		147		52-41-00
312AR	DOOR-EQUIPMENT COMPT. ACCESS		312		52-41-00
313AL	DOOR-EQUIPMENT COMPT. ACCESS		313		52-41-00
315AL	DOOR-APU ACCESS		315		52-41-00
316AR	DOOR-APU ACCESS		316		52-41-00
317AL	ACCESS FAIRING-APU EXHAUST		317		52-41-00
677DR	DOOR-CONTROL PANELS CLS		677		52-41-00



BM3 52 41 00 0 AAM0 00

Component Location
Figure 001

3. Component Description

A. Glide Antennas Access Door 121AL
Access door 121AL is located in fuselage nose section 11 between STA858/FR5 and STA881/FR6 and allows access to the glide antennas 1 and 2.

B. Avionics Compt. Access Door 121BL
The inward opening door is located in fuselage nose section 11 between STA904/FR7 and STA972/FR10 and allows access to the avionics compartment.

C. CLS Control Panel Door 122DR

R **ON A/C 001-005, 105-105,

(Ref. Fig. 002)

**ON A/C ALL

R Post SB 52-2043 For A/C 001-005,105-105,

(Ref. Fig. 003)

R **ON A/C 001-005, 105-105,

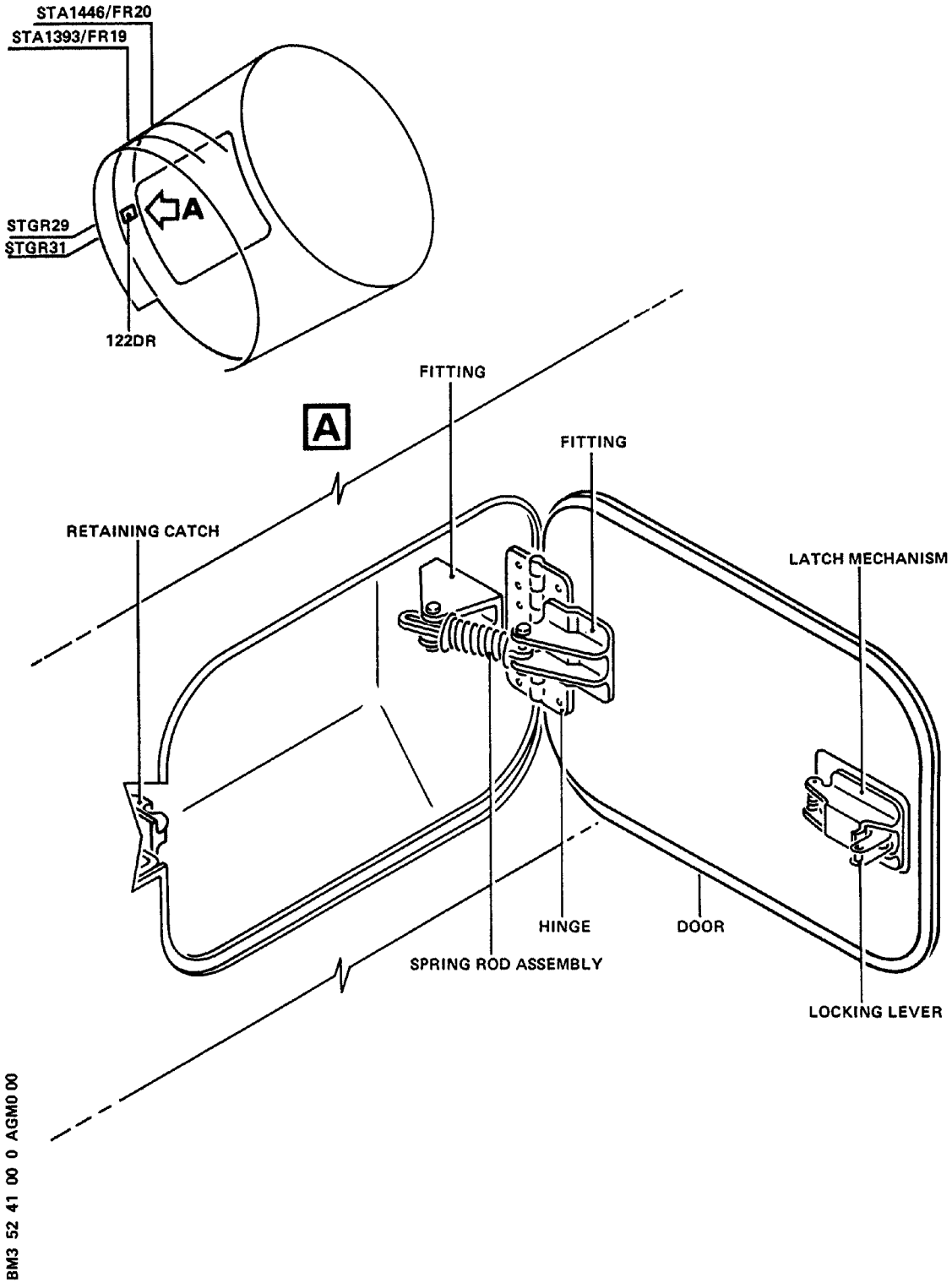
The door 122DR is located on the RH side of the fuselage and provides access to the cargo loading control panel. The door 122DR is located between STA1393/FR19 and STA1446/FR20.

(1)Description and Operation
The door fits flush with the fuselage contour. It is made from light alloy and the shape of their inner surface is achieved by a chemical etching process. Riveted to the inside of the door is the latch mechanism and fittings for the spring rod assembly. One hinge is riveted to the door 122DR and screwed to the fuselage. The spring rod assembly is attached between the riveted fittings on the fuselage structure and door forming an overcenter device which loads a spring to retain the door in the open position and also assists in closing the door.
The latch mechanism of the door consists of two latching units, each comprising a latch body, a locking lever, return springs and a flap. When the door is closed and locked, the locking lever pin is engaged in the retaining catch on the structure. The door locking lever and flap are flush with the fuselage skin. The retaining catch for the door 122DR is adjustable to the fuselage structure.

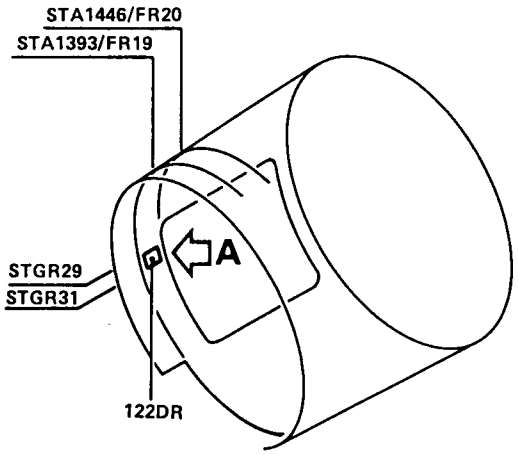
D. CLS Control Panel Door 677DR

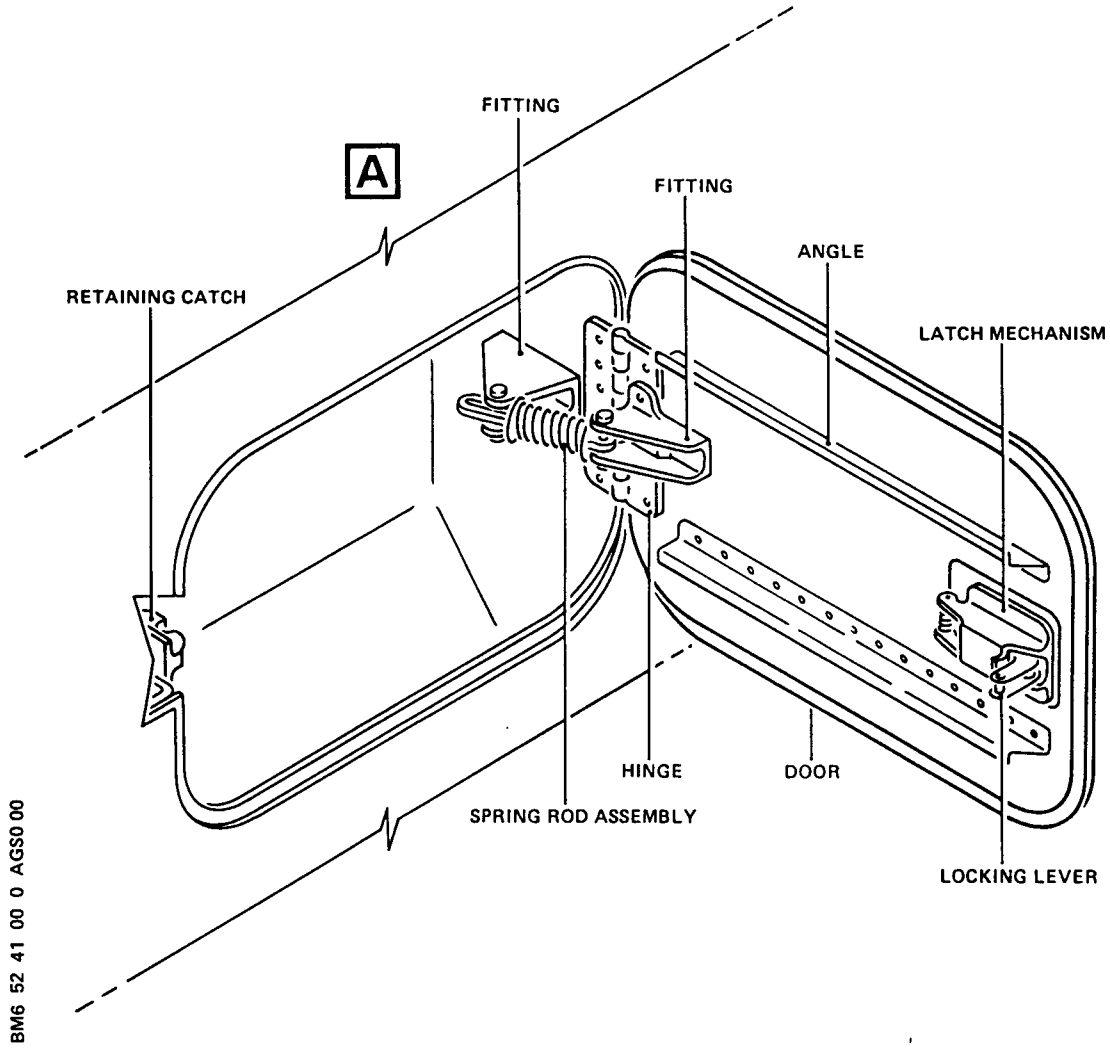
**ON A/C ALL

R Post SB 52-2043 For A/C 001-005,105-105,



CLS Control Panel Door 122DR
Figure 002





CLS Control Panel Door 122DR
Figure 003

The door 122DR is located on the RH side of the fuselage and provides access to the cargo loading control panel. The door 122DR is located between STA1393/FR19 and STA1446/FR20.

(1)Description and Operation

The door fits flush with the fuselage contour. It is made from light alloy and the shape of their inner surface is achieved by a chemical etching process. Riveted to the inside of the door 122DR are two reinforcement angles to maintain the correct contour. The door also has riveted to the inside a latch mechanism and fittings for the spring rod assembly. One hinge is riveted to the door 122DR and screwed to the fuselage. The spring rod assembly is attached between the riveted fittings on the fuselage structure and the door, forming an overcenter device which loads a spring to retain the door in the open position and also assists in closing the door.

The latch mechanism of the door consists of two latching units, each comprising a latch body, a locking lever, return springs and a flap. When the door is closed and locked, the locking lever pin is engaged in the retaining catch on the structure. The door locking lever and flap are flush with the fuselage skin. The retaining catch for the door 122DR is adjustable to the fuselage structure.

D. CLS Control Panel Door 677DR

**ON A/C ALL

(Ref. Fig. 004)

The door 677DR is located between STA3143/FR55/58 and STA3196/FR59 on the RH side of the fuselage wing fairing and provides access to the cargo loading control panel.

(1)Description

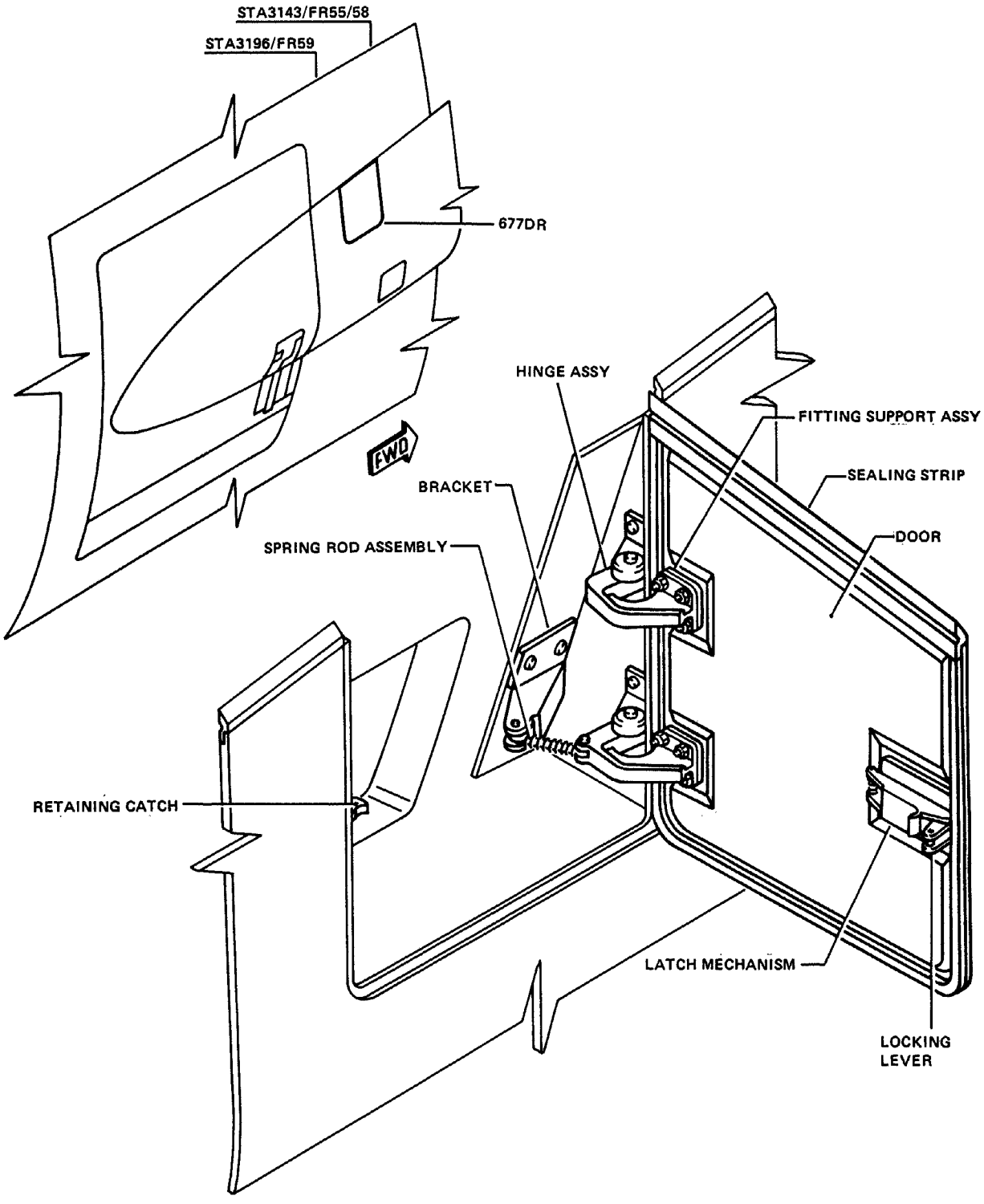
The panel door is of a sandwich construction and is flush with the wing fairing contour.

Two hinge assemblies are attached to the door 677DR by countersunk screws. A bracket and two support fitting assys are attached to the wing fairing mounting bracket at the inside of the wing fairing. The spring rod assembly is attached between the bracket and the lower hinge assy of the door forming an overcenter device which loads a spring to retain the door in the fully open position and also assists in closing the door. Riveted to the inside of the door is the latch mechanism. The latch mechanism consists of two latching units, each comprising a latch body, a locking lever, return springs and a flap. When the door is closed and locked, the locking lever pin is engaged in the retaining catch on the wing fairing. The door locking lever and flap of the latch mechanism are flush with the wing fairing.

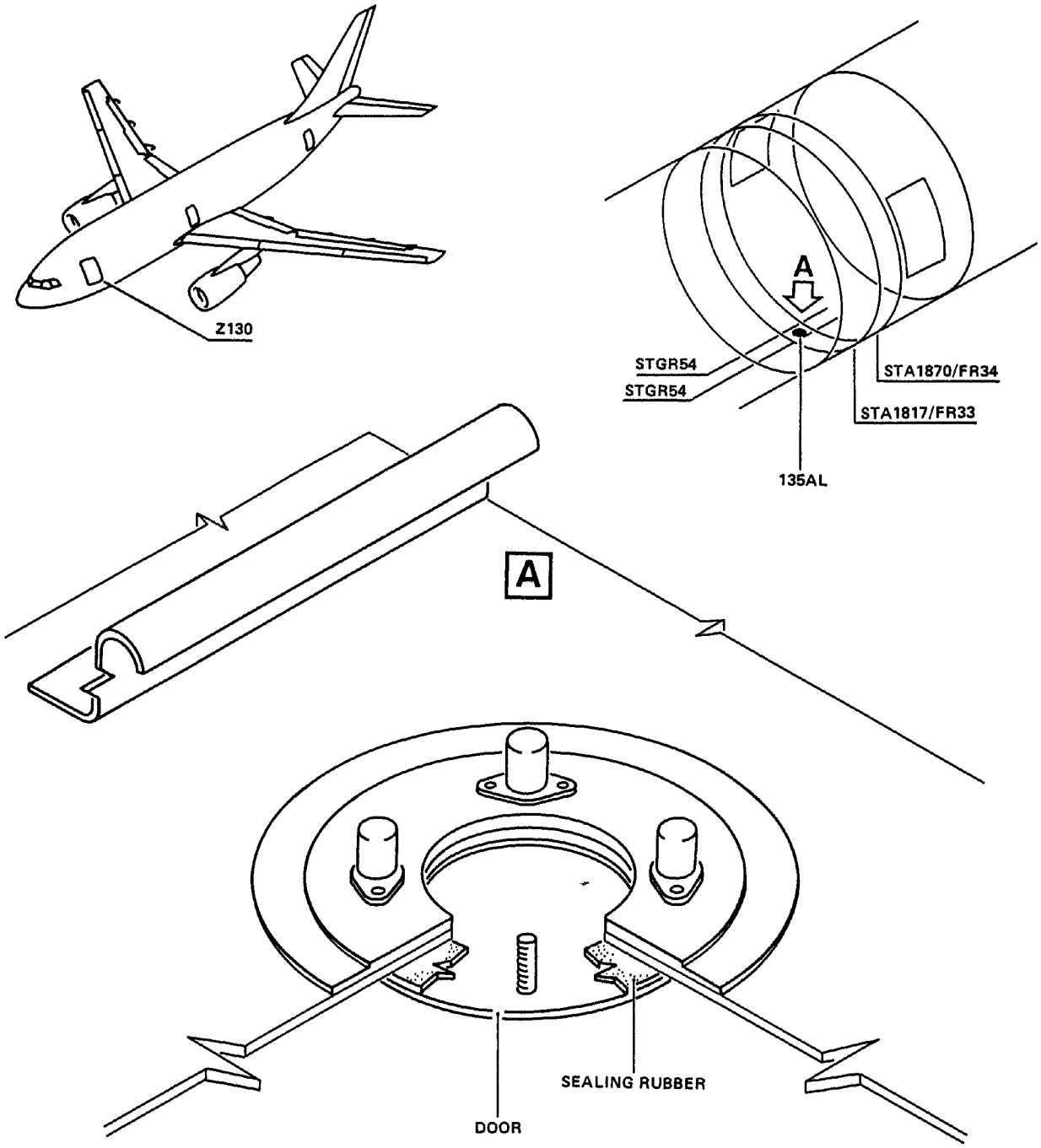
To seal the door to the fuselage and wing fairing, a sealing strip is bonded around the inner periphery.

E. FWD Cargo Compartment Drain System Door 135AL

(Ref. Fig. 005)



CLS Control Panel Door 677DR
Figure 004



FWD Cargo Compartment Drain System Door 135AL
Figure 005

The door located in the outer skin of the fuselage between STA1817/FR33 and STA1870/FR34 and made from aluminium alloy is adapted to the fuselage contour and provides access to the FWD cargo compartment drain system. A sealing rubber is bonded to the inner surface of the door. The door is attached to the fuselage by means of countersunk screws.

F. Air Fan and Air Conditioning Control Valve Access Door 134AR, 136AR
(Ref. Fig. 006)
(Ref. Fig. 007)

R **ON A/C 001-005, 103-103,

The two elliptically shaped doors are identical in design. They are located in the lower fuselage front section and seal the exhaust air manifold pressure-tight and flush with the external surface. Each removable door can be opened by a handle located in a recess in the door center.

(1)Description

(a)Structure

The door is constructed from light alloy. The main structure consists of a milled part, which is reinforced with integrated webs. A locking mechanism bearing support is integrated to the center of the door structure and carries two flanged bushes for the handle and bush assembly. On the outside a grip recess accommodates the handle. Four latch guides for locking linkages are screwed to the door structure. Shoulders supporting the door against the fuselage frame. They are integrated to the door structure.

Sealing of the door/fuselage opening, when the door is closed, is obtained by a seal to the door frame and retained in position by a seal retainer, which is secured with button-headed screws.

(b)Locking Mechanism

The locking mechanism is installed in the center of the door. It consists of a locking rod assembly, handle and inner and outer bushes.

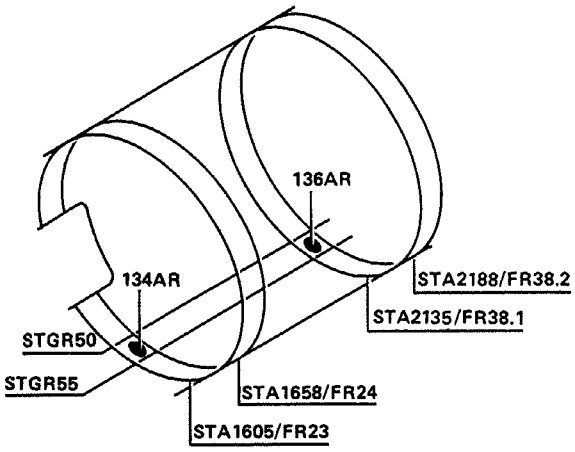
R **ON A/C 006-102, 104-200,

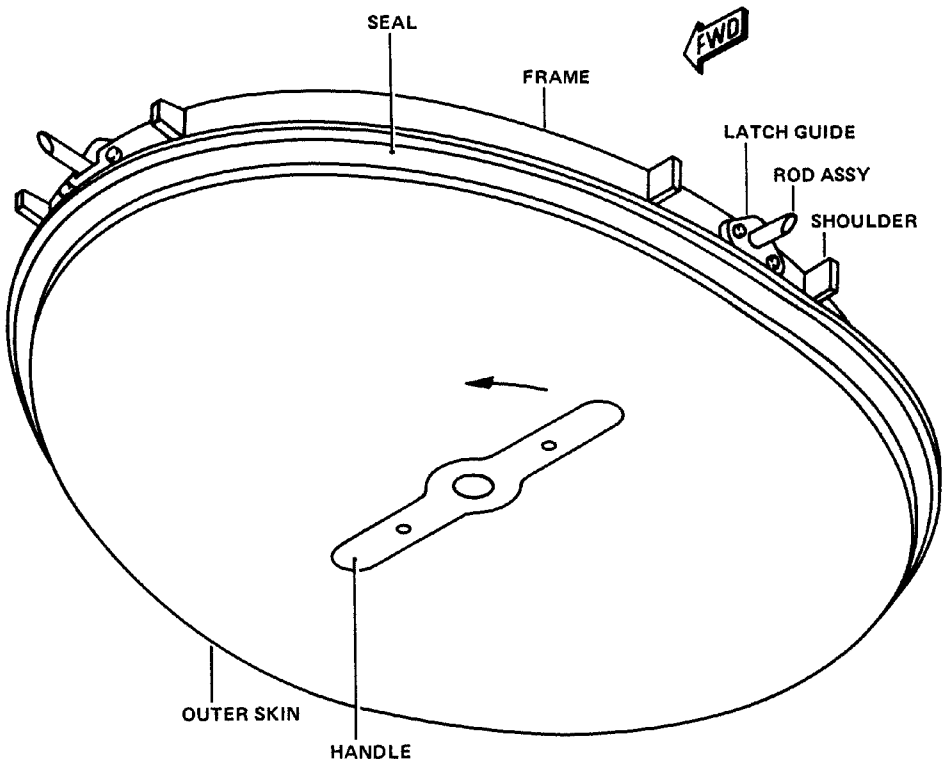
The two elliptically shaped 134AR and 136AR doors are identical in design. They are located in the lower fuselage front section and seal the exhaust air manifold pressure-tight and flush with the external surface. Each removable door can be opened by a handle located in a recess in the door center.

(1)Description

(a)Structure

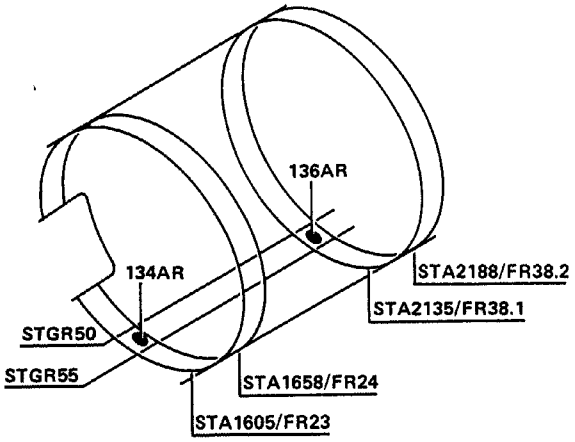
The door is constructed from light alloy. The main structure consists of a milled part, which is reinforced with integrated webs. A locking mechanism bearing support is integrated to the center of the door structure and carries two flanged bushes for the handle and bush assembly. On the outside a grip recess accommodates the handle. Four latch guides for locking linkages are screwed to the door structure. Shoulders supporting the door against the fuselage frame. They are integrated to the door structure.

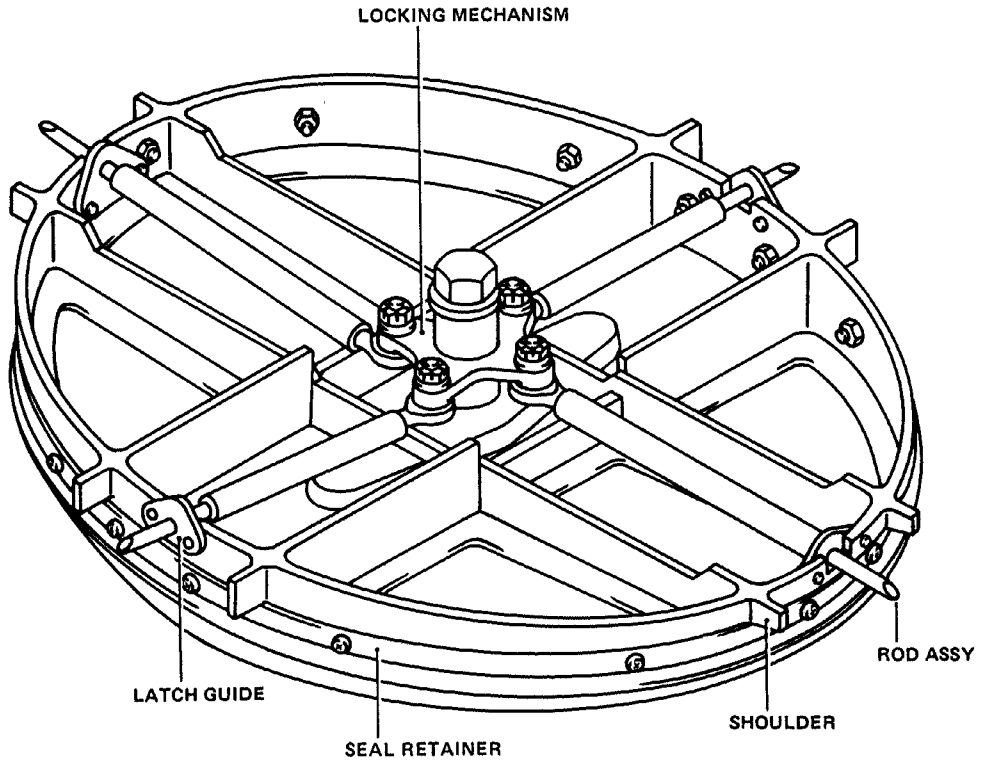




BM3 52 41 00 0 ANU0 00

Door 134AR, 136AR Inside View
Figure 006





BM3 52 41 00 0 APU0 00

Door 134AR, 136AR Inside View
Figure 007

Sealing of the door/fuselage opening, when the door is closed, is obtained by a seal to the door frame and retained in position by a seal retainer, which is secured with button-headed screws.
Located behind the access door 136AR is a safety handle. The handle operates a mechanical safety device (Ground Air Supply Blocking Device). The safety device prevents the connection of a ground air supply to the ground connector of the air condition system.
Therefore the access door 136AR must be removed and the handle is to be operated before the ground air supply can be connected.
It is not possible to close the access door 136AR with the handle operated.

(b)Locking Mechanism

The locking mechanism is installed in the center of the door. It consists of a locking rod assembly, handle and inner and outer bushes.

R **ON A/C 001-005, 103-103,

The inner bush is splined to the outer bush which carries a flange forming a pivot for the four locking rods. The handle is fitted in the inner bush and is located by a key which passes through a slot in the handle shaft and two longitudinal slots in the inner bush.
The handle is spring-loaded outwards by a spring fitted in the inner bush and retained by a cap nut. Movement of the handle is limited by the key and the longitudinal slots in the inner bush.
The handle locking mechanism is installed in the locking handle shaft. The locking mechanism release bolt is located by a pin, which passes through holes in the handle shaft and a slot in the release bolt and is retained by a screw. A spring-loaded locking pin key and stop are installed in the handle shaft above the release bolt.

(3)Operation

When the release bolt is depressed, the key moves the lock pin out of the cross hole in the wall of the inner bush against the pressure of the spring. This permits the spring acting on the handle shaft to force the handle out of the grip recess. Rotation of the handle is now possible so that by turning the handle counterclockwise by 90° the locking linkages are retracted and the door can be removed. The rotary motion of the handle is limited to 90° by the two stop edges of the bushing and the leading edges of the locking plate.
The door can be closed by positioning the door, turning the handle clockwise to extend the locking linkages and then pressing the handle into the grip recess until the door locking device is engaged.

G. Green Hydraulic System Ground Connector Access Door 147AL

Access door 147AL is located on the fuselage between STA2878/FR53 and STA2931/FR54 and provides access to the ground connector used to service the green hydraulic system.
The door is of the fast-opening type, opens outwards and towards the front of the aircraft.

H. Equipment Compartment Access Door 312AR

R **ON A/C 006-102, 104-200,

The inner bush is splined to the outer bush which carries a flange forming a pivot for the four locking rods. The handle is fitted in the inner bush and is located by a key which passes through a slot in the handle shaft and two longitudinal slots in the inner bush.
The handle is spring-loaded outwards by a spring fitted in the inner bush and retained by a cap nut. Movement of the handle is limited by the key and the longitudinal slots in the inner bush.
The handle locking mechanism is installed in the locking handle shaft. The locking mechanism release bolt is located by a pin which passes through holes in the handle shaft and a slot in the release bolt and is retained by a screw. A spring-loaded locking pin key and stop are installed in the handle shaft above the release bolt.

(c) Ground Air Supply Blocking Device

The safety device is installed on the left side of the opening of the access door 136AR at STA2135/FR38.1. The safety device consists of a handle, cable assy, locking pin, stopper and an integral plate. The cable assy is attached to the handle and is secured to the structure at STA2082/FR38 and STA2135/FR38.1 with clamps. It is connected to the actuating lever of the locking pin behind the service door 135BL.
The rotary motion of the handle of the safety device is limited to 180° by the integral plate and the stopper.

(2) Operation

When the release bolt is depressed, the key moves the lock pin out of the cross hole in the wall of the inner bush against the pressure of the spring. This permits the spring acting on the handle shaft to force the handle out of the grip recess. Rotation of the handle is now possible so that by turning the handle counterclockwise by 90° the locking linkages are retracted and the door can be removed. The rotary motion of the handle is limited to 90° by the two stop edges of the bushing and the leading edges of the locking plate.
When the access door 136AR is removed, the handle of the safety device can be operated. The handle can be rotated 180° clockwise until the stopper contacts the surface of the integral plate. The safety handle remains in the open position and protudes from the opening of the access door 136AR.
When the safety handle is rotated in the open position it operates the locking pin via the cable assy. The locking pin moves away from the service door 135BL and releases it. The service door 135BL can now be opened to connect the ground air supply. Before the access door 136AR can be closed do the subsequent:
- close the service door 135BL,
- rotate the safety handle 180° counter clockwise until the lug clips in to the securing clip.

When the safety handle is rotated counter clockwise the locking pin is operated via the cable assy and safeties the service door 135BL.
The door can now be closed by positioning the door, turning the handle clockwise to extend the locking linkages and then pressing the handle into the grip recess until the door locking device is engaged.

R G. Green Hydraulic System Ground Connector Access Door 147AL
R Access door 147AL is located on the fuselage between STA2878/FR53
R and STA2931/FR54 and provides access to the ground connector used to
R service the green hydraulic system.
R The door is of the fast-opening type, opens outwards and towards the front
R of the aircraft.

R H. Equipment Compartment Access Door 312AR

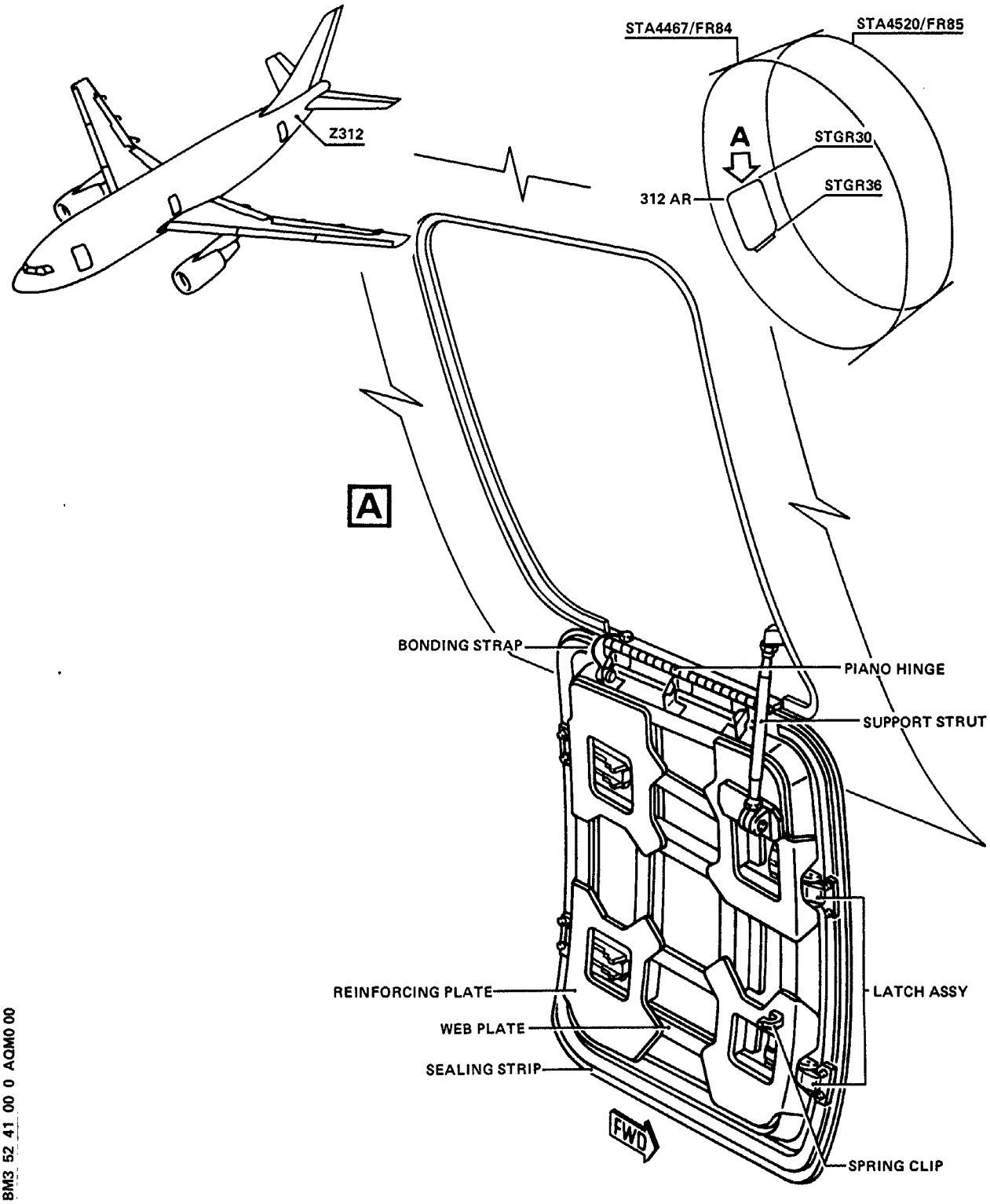
R **ON A/C ALL

(Ref. Fig. 008)
The equipment compartment access door is located in the fuselage tail section between STA4467/FR84 and STA4520/FR85 at stringers 30 and 36 and provides access to the flight control equipment.
The access door is attached to the lower fuselage structure by means of a piano hinge and opens outwards from the fuselage. The door is held in the open position by a support strut and secured in the closed position by a spring clip.

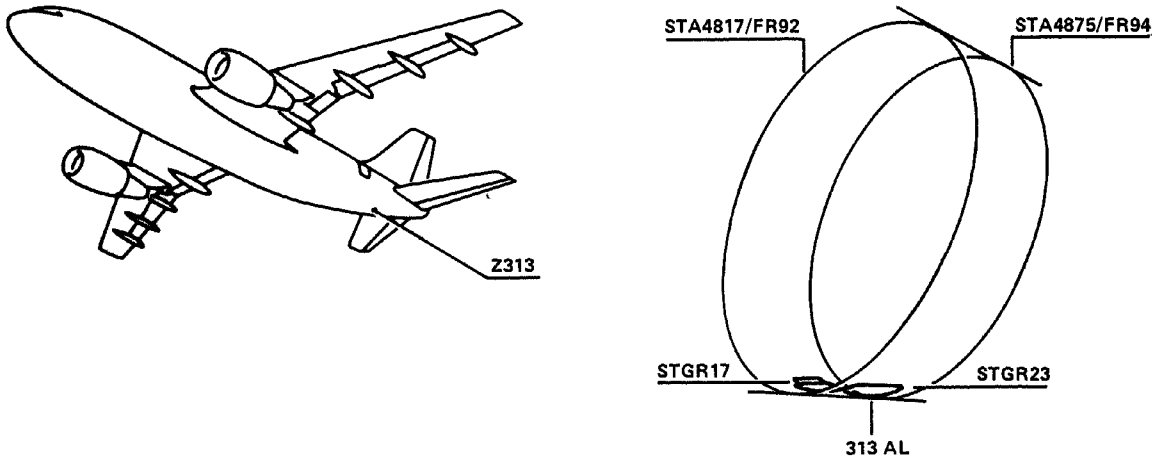
(1)Description
The door is constructed from an aluminium alloy Z-section frame reinforced by web plates, reinforcing plates and angle brackets.
The door is sealed by a rectangular sealing strip and is bonded around the periphery of the door. Common grounding of the access door to the fuselage structure is achieved by a bonding strap.
The locking mechanism consists of four latch assemblies, each comprising a latch body, locking lever, return springs and a flap. When the door is closed and locked, the locking lever pins are engaged in retaining catches attached to the structure. The door, locking levers and flaps are flush with the fuselage skin.

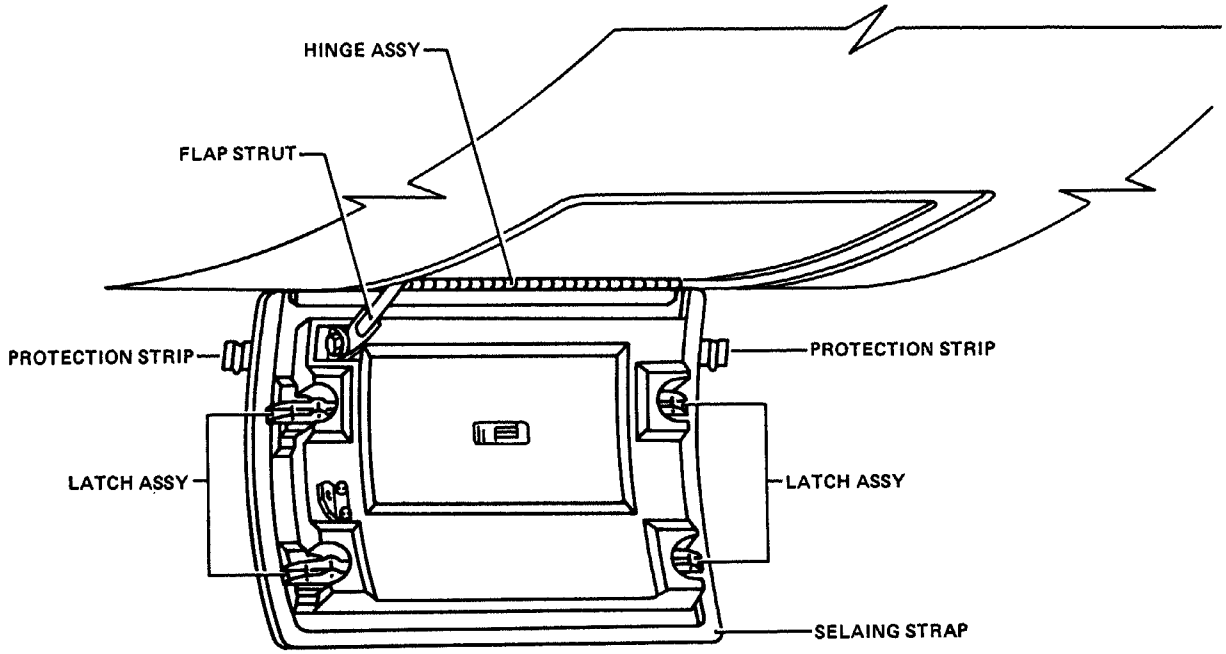
I. Equipment Compartment Access Door 313AL
(Ref. Fig. 009)
The outward opening door is located on the underside of the fuselage tail section between STA4817/FR92 and STA4875/FR94 and permits access to components installed in the fuselage tail section.
The door which is attached to the fuselage by means of a piano hinge, is held in the open position by a support strut and, when closed, is secured by quick-release fasteners.

(1)Description
(a)Structure
The door is constructed from a honeycomb core reinforced by layers of fiberglass.
To seal the door to the fuselage, a sealing strip is bonded around the inner periphery. A protective strip attached to the outer surface of the door prevents the fuselage skin from being damaged during opening.
(b)Suspension
A piano hinge allows the door to swing down to the open position when fasteners are released.
To secure the door in the fully open position a support strut is attached to the door via a bracket and fastened to the fuselage by a



Equipment Compartment Access Door 312AR
Figure 008





Equipment Compartment Access Door 313AL
Figure 009

quick-release pin.

J. APU Access Doors 315AL and 316AR
(Ref. Fig. 010)
The APU access doors are located in the fuselage tail cone and form the lower part of the fuselage between STA4905/FR95 and STA5094/FR101. The doors are hinged and, when closed, align with the contour of the fuselage.

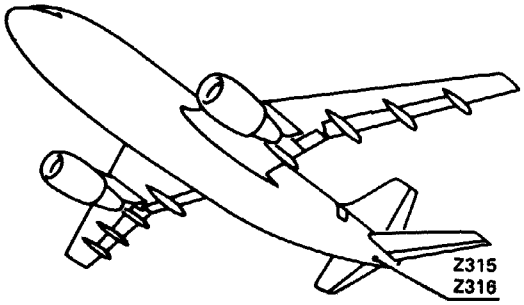
(1)Description
Each access door is constructed from an aluminium alloy outer skin, longerons, frames and stringers. Fitted to the LH access door is an oil cooler outlet duct and a drain mast. An explosion flap and louvered ventilation air intake is fitted in both access doors.
The access doors are held closed by hook latches attached to the lower longeron of the LH access door. The hooks secure onto eye-bolts mounted in the lower longeron of the RH access door. Pin latches are mounted in the fwd and aft lower side frame of each access door and locate in arrester fittings located on the fwd STA4905/FR95 and the aft STA5094/FR101 bulkheads of the APU compartment.
Hook fittings, attached to the upper longeron of each access door, limit the amount by which the access doors can be opened. A support strut secured to the fwd side frame of both access doors is attached to the fwd bulkhead STA4905/FR95 of the APU compartment by means of a quick-release pin.

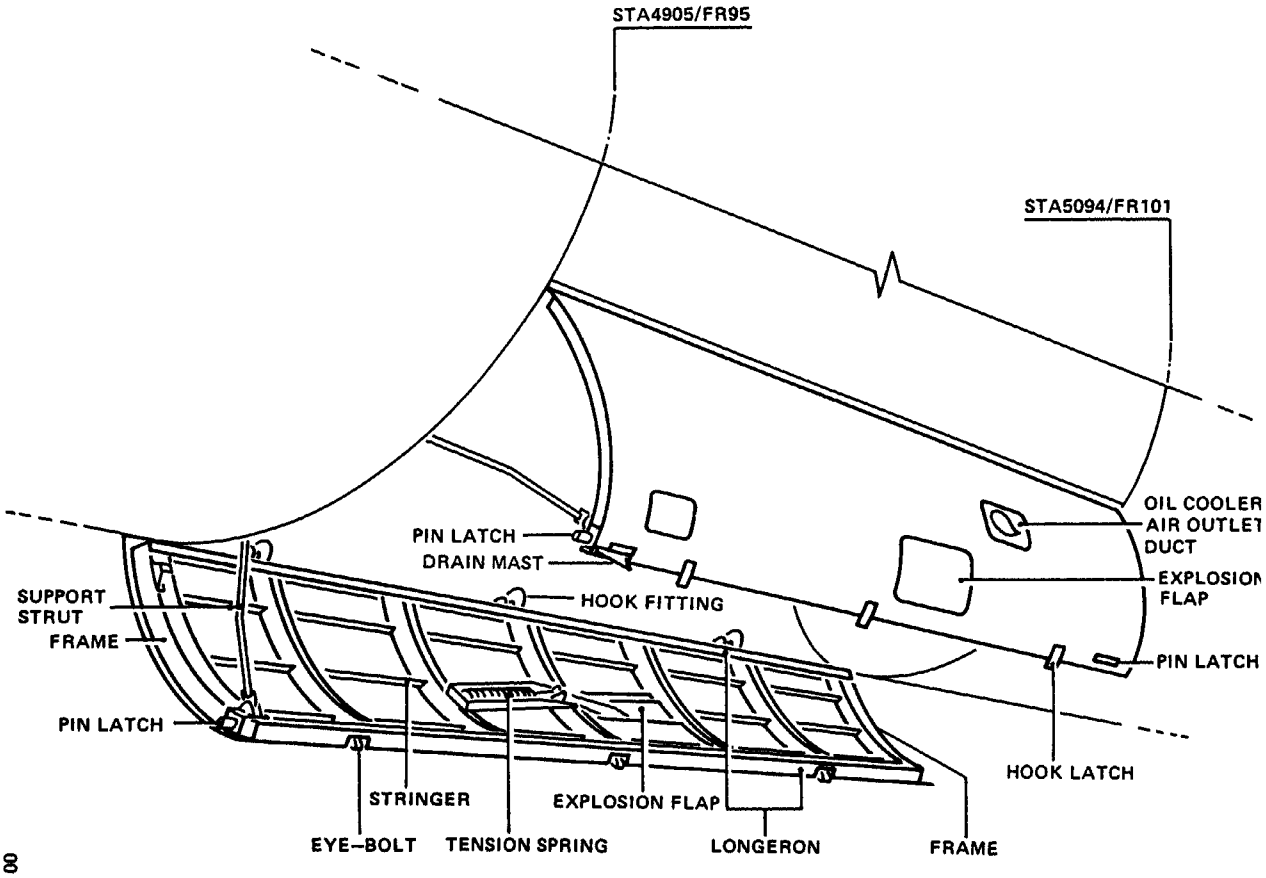
(2)Operation
(a)Opening APU Access Doors
Pressing the catches of the hook and pin latches at the area designated PUSH, releases a spring in the latch housing and allows the catches to move out from the door.
Further downward movement of the catches releases the latches from their locking eyes and withdraws the pin latches from their fwd and aft housings. The doors are now unlocked and can be opened. As the doors are opened, the support struts extend and lock when the doors are in the fully open position.

(b)Closing APU Access Doors
Before the doors are closed, the support struts must be unlocked by removing the quick-release pin.
After the hook fasteners have engaged with their respective eye bolts, close the latches until the catches lie flush with the door.
The pin latches are engaged by closing the catches until they are flush with the doors.

(3)Operation of Explosion Flaps
The explosion flaps are held closed and flush with the contour of the doors by tension springs fitted to each flap.
In the event of a positive explosive pressure occuring in the APU bay, the forces acting on the explosion flaps will overcome the spring tension and force the flaps open. The explosion flaps will close when the explosive pressure force becomes less than the spring force.

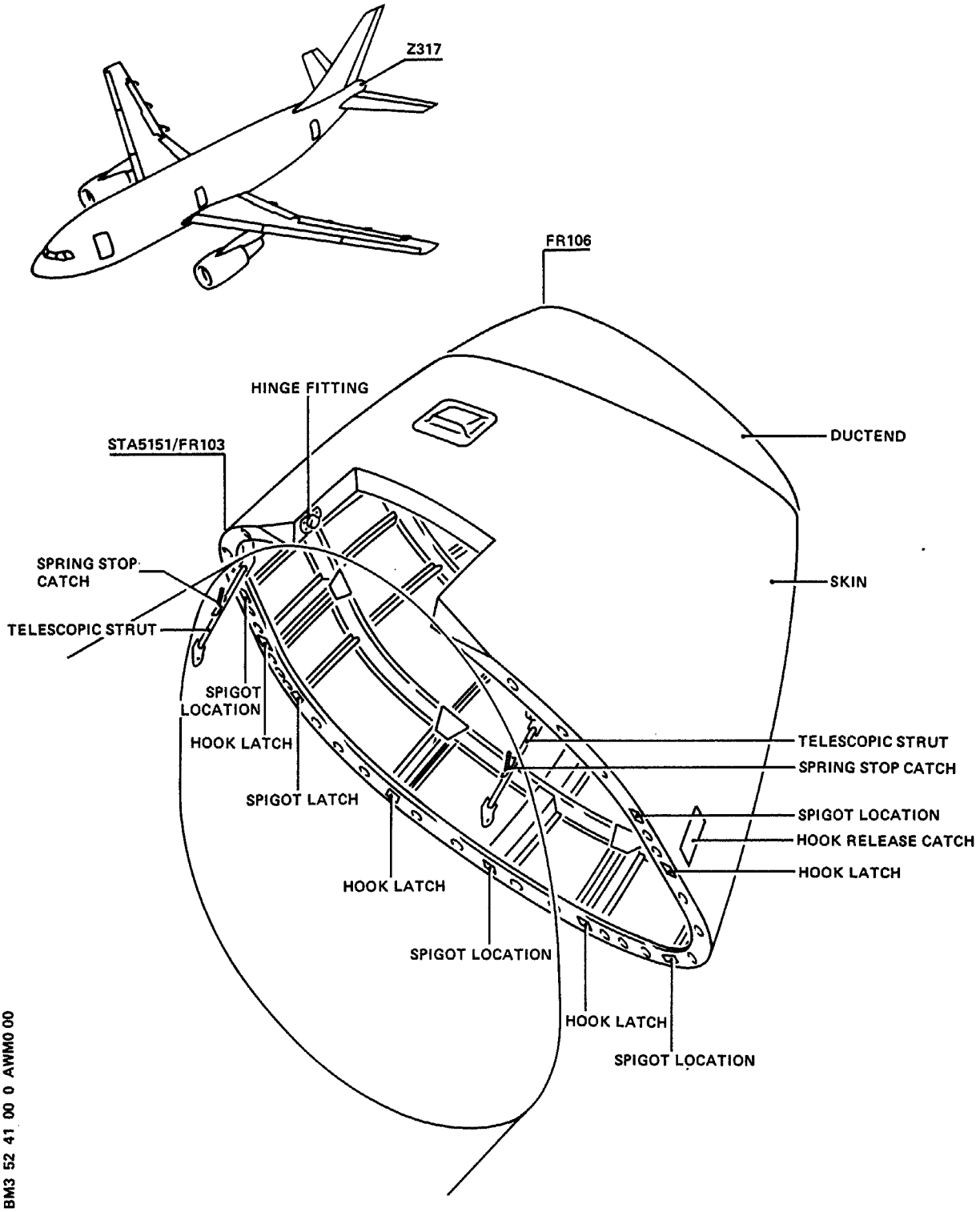
K. APU Exhaust Access Fairing 317AL
(Ref. Fig. 011)
The fairing is located at the end of the fuselage tail cone, extends from





BM3 52 41 00 0 AVM0 00

APU Access Doors 315AL and 316AR
Figure 010



APU Exhaust Access Fairing 317AL
Figure 011

STA5151/FR103 thru FR106 and surrounds the APU exhaust outlet.
The access fairing is hinged and, when closed, completes the aerodynamic tail cone of the fuselage. The fairing is secured in the closed position by hook latches.

(1)Description

The access fairing constructed of frames and stringers covered by an outer skin is fabricated from aluminium alloy and riveted together. A duct fabricated from stainless steel alloy is riveted to the end of the duct. Drain holes located aft of FR103A facilitate the drainage of condensation. Hinge fittings attached to the duct between FR103A and FR105 and hinged brackets attached to the fairing are joined by means of hinge pins to form an upward opening hinge for the access fairing. When open, the access fairing is supported by telescopic struts which are attached to brackets mounted on the fairing at FR103A and the tail cone at FR103. The telescopic struts are locked in the extended position by spring stop catches.

In the closed position, the access fairing is located by spigots mounted on STA5151/FR103 and secured by hook latches which, when engaged and locked, lie flush with the access fairing.

EQUIPMENT COMPARTMENT ACCESS DOOR REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.60 m (11.80 ft.)
B.	Cotter Pins
C. Material No. 04-004	Common Greases (Ref. 20-31-00)
D. Material No. 05-002	Special Materials (Ref. 20-31-00)

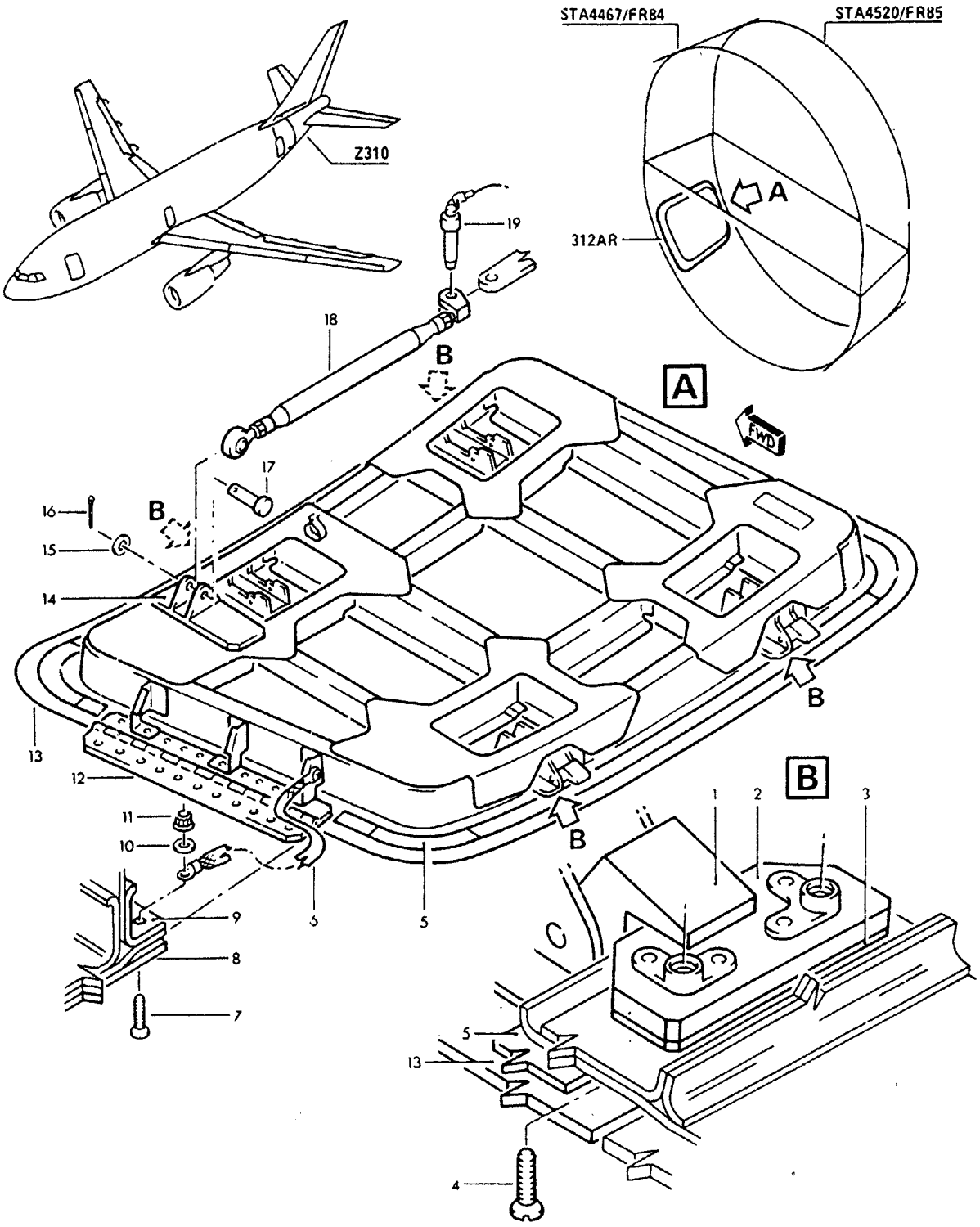
Referenced Procedure
- 20-28-11, P. Block 1 — Electrical Bonding

2. Procedure

A. Job Set-Up
(1)Position access platform.

B. Removal (Ref. Fig. 401)
(1)Unlock and open door.
(2)Remove nuts (11), washers (10), bonding strap (6) and screws (7).
(3)Remove hinge (12) from fuselage skin panel (8) and channel section (9) to remove door (13).

C. Preparation for Installation
(1)Inspect hinge, (12), seal (5), and bonding strap (6) for good condition, renew if necessary.
(2)Remove cotter pin (16), washer (15) pin (17) and support strut (18) from bracket (14).
(3)Position support strut (18) in bracket (14) on replacement door, and install pin (17), washer (15) and cotter pin (16).
NOTE : Steps (2) and (3) are not applicable if original door is to be installed.
(4)Apply synthetic grease (Mat. No. 04-004) to pip pin (19) and locking mechanism (1).



Equipment Compartment Access Door 312AR
Figure 401

D. Installation (Ref. Fig. 401)
(1)Apply corrosion-preventive paste (Mat. No. 05-002) to threads of all screws.
(2)Position door (13) and insert hinge (12) between channel section (9) and skin panel (8).
(3)Install screws (7), bonding strap (6), washers (10) and nuts (11). For electrical bonding, refer to 20-28-11, P. Block 1
(4)Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.
(5)Check that door (13) contacts rubber seal (5).
(a)Should door not contact rubber seal, adjust as follows:
1 Remove screws (4) and stops (2).
2 Change number of shims (3), as required.
3 Apply corrosion-preventive paste (Mat. No. 05-002) to threads of screws (4).
4 Position stops (2) and install screws (4).
5 Apply corrosion-preventive paste (Mat. No. 05-002) to all exposed thread ends.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close and lock door.
(3)Remove access platform.

ACCESSORY COMPARTMENT ACCESS DOOR REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.20 m (13.80 ft.)

2. Procedure

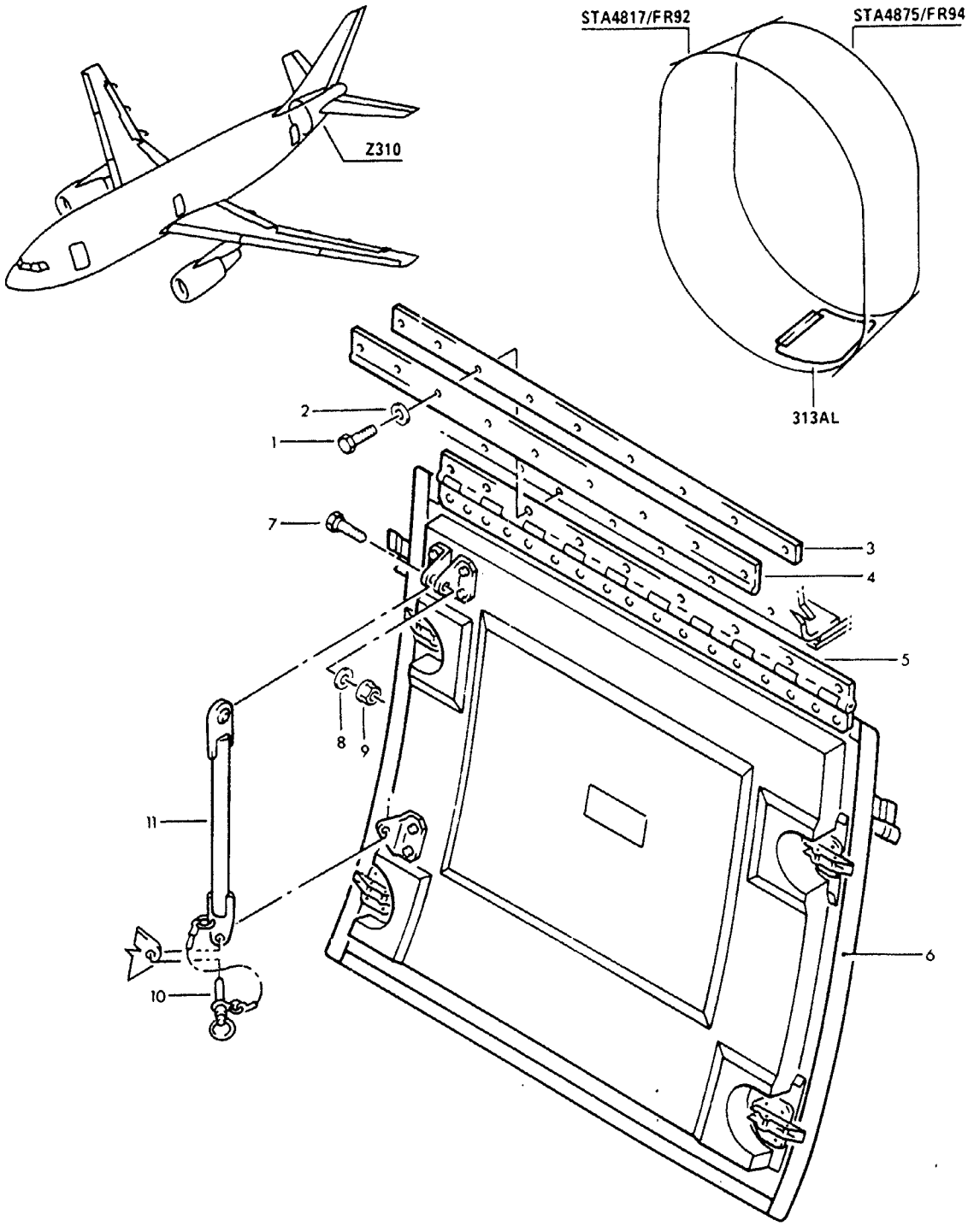
A. Job Set-Up
(1)Position access platform.

B. Removal (Ref. Fig. 401)
(1)Unlock and open access door.
(2)Remove bolts (1), washers (2), retainer (4), seal (3) and access door.

C. Preparation for Installation
(1)Check seals (3, 6) and piano hinge (5) for good condition and renew if necessary.
NOTE : Steps (2) and (3) are not applicable, if original door is to be installed.
(2)Remove pip pin (10), nut (9), washer (8), bolt (7) and support strut (11).
(3)Position support strut (11) to replacement door, and install bolt (7), washer (8), nut (9) and pip pin (10).

D. Installation
(1)Position access door, seal (3) and retainer (4) and install washers (2) and bolts (1).

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close and lock door.
(3)Remove access platform.



Accessory Compartment Access Door 313AL
Figure 401

1. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedures	
- 52-41-14, P. Block 501	Avionics Compartment Access Door
- 53-10-27, P. Block 401	Avionics Compartment Floor Panels
- 53-11-70, P. Block 1	Ladders

2. Procedures

A. Job Set-Up
(1)Open access door 121BL.
(2)Extend avionics compartment access ladder (Ref. 53-11-70, P. Block 1).

B. Removal (Ref. Fig. 401)
(1)Disconnect the bonding strips (3).
R (2)Disconnection of the crank
R WARNING : BE VERY CAREFUL WHEN YOU DISCONNECT CRANK FROM
R COMPENSATION ARM. COMPENSATION ARM IS UNDER TENSION.
R INJURY TO YOUR FINGERS CAN OCCUR.
R (a)Disconnect the crank (1) from the compensation arm (2).
(3)Remove the cotter pins and the nuts (6) and retain the washers (7).
(4)Hold the door (4) and remove the bolts (9).
(5)Remove the door.

C. Installation
(1)Install the door.
(2)Install the two bolts (9) and the washers (7). Install the two nuts (6) but do not tighten them at this stage.
(3)Close the door.

D. Check of the clearance (Ref. Fig. 402)
(1)Make sure that the peripheral clearance J2 is 2 -1 +1 mm (0.079 -0.039 +0.039 in.).
NOTE : Contact AIRBUS when J2 is not in tolerances.
(2)Make sure that the step J1 is 0 +0 -2 mm (0 +0 -0.079 in.).
(3)If the step J1 is in the tolerances, do the procedure as follows:
(a)For the same door installed:
- Open the door.
- Tighten the two nuts (6). Install the cotter pins.
(b)For new or overhauled door only:
- Open the door.
- Remove the nuts (6) and retain the washers (7).
- Hold the door (4) and remove the bolts (9).
- Loosen the nuts (5) and tighten them.
- Install the door (4).
- Install the two bolts (9) and the washers (7). Tighten the two

nuts (6). Install the cotter pins.
- Tighten the nuts (21) (Ref. Fig. 403).

(4)If the step J1 is not in the tolerances, do the adjustment below:
(a)Open the door.
(b)Remove the nuts (6) and retain the washers (7).
(c)Hold the door (4) and remove the bolts (9).
(d)Loosen the nuts (5).
(e)Adjust the position of the bearing rod-ends (8).
(f)Tighten the nuts (5).
(g)Install the door (4).
(h)Install the two bolts (9) and the washers (7). Tighten the two nuts (6). Install the cotter pins.
(j)If necessary, adjust the depth of the washer (22) and tighten the nuts (21) (Ref. Fig. 403).

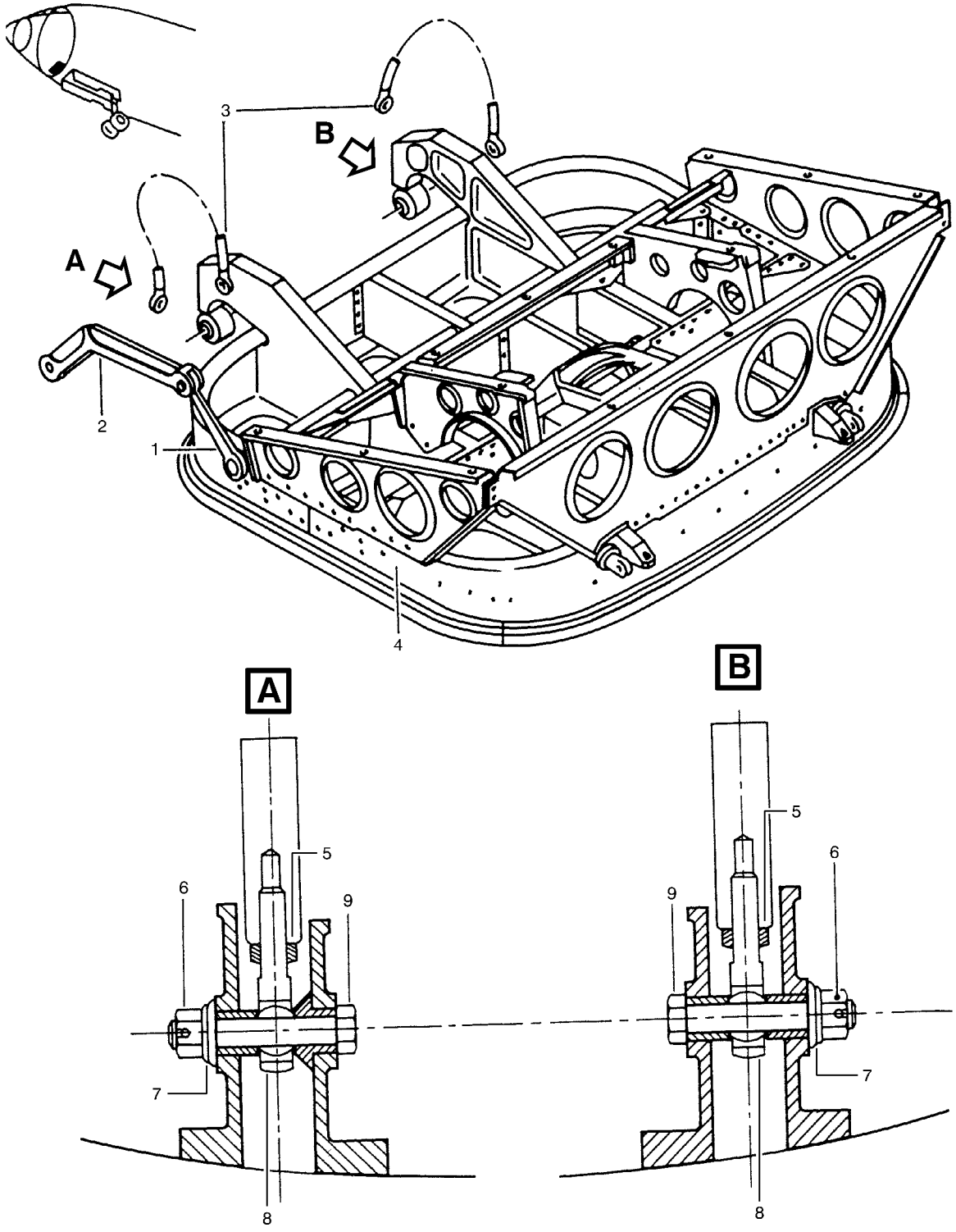
E. End of Installation

R (1)Connection of the crank
R WARNING : BE VERY CAREFUL WHEN YOU CONNECT CRANK TO
R COMPENSATION ARM. COMPENSATION ARM IS UNDER TENSION.
R INJURY TO YOUR FINGERS CAN OCCUR.
R (a)Connect the crank (1) from the compensation arm (2).
(2)Connect the bonding strips (3).

F. Check of the compensation mechanism (Ref. Fig. 404):
(1)Make sure that the area of the door in the electronic bay is secured.
(2)Make sure that the floor panel 121GF is removed from the door (Ref. 53-10-27, P. Block 401).
(3)Make sure that the door is open and that it overshoots the ramp. Make sure that the handle is in the closed position.
(4)Put a dynamometer in position on the outer centerline of the door handle (30) close to the flapper (31).
(5)Measure the load necessary to open the door by pushing the door up with the dynamometer.
(6)Make sure that the load is between 1.8 daN and 3.0 daN.
(7)If the load value is not in the tolerances, do the adjustment below:
R (a)Disconnect the bonding strip (3).
R (b)Disconnection of crank
R WARNING : BE VERY CAREFUL WHEN YOU DISCONNECT CRANK FROM
R COMPENSATION ARM. COMPENSATION ARM IS UNDER TENSION.
R INJURY TO YOUR FINGERS CAN OCCUR.
R 1 Disconnect the crank (1) from the compensation arm (2).
R (c)Loosen the bolts (32).
R (d)Adjust the compensation mechanism by turning the cam (33) and tighten the bolts (32).
R (e)Connection of crank
R WARNING : BE VERY CAREFUL WHEN YOU CONNECT CRANK TO
R COMPENSATION ARM. COMPENSATION ARM IS UNDER TENSION.
R INJURY TO YOUR FINGERS CAN OCCUR.
R 1 Connect the crank (1) from the compensation arm (2).
R (f)Reconnect the bonding strip (3).
(8)Check the load again with the dynamometer.

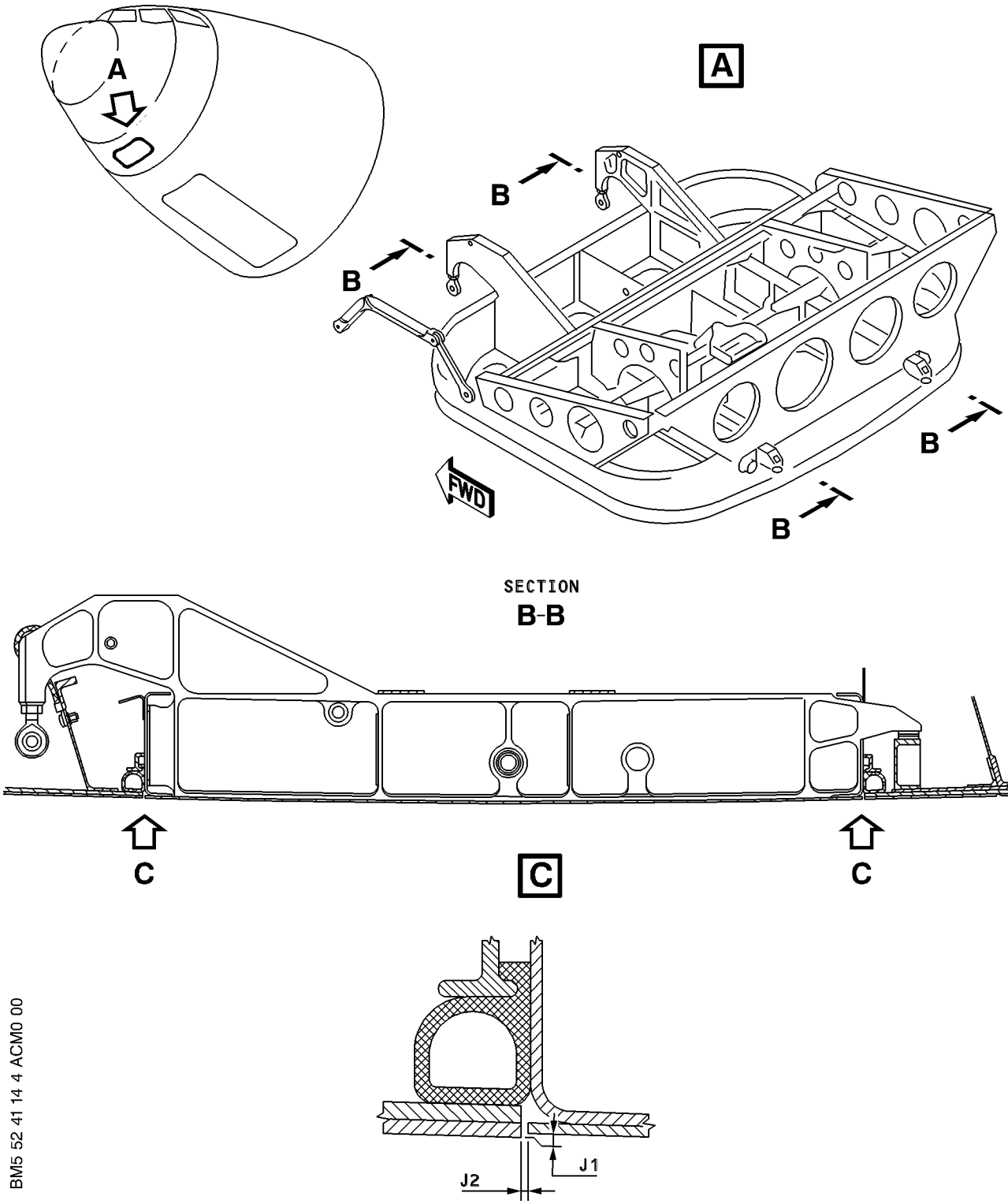
(9)If the load value is not in the tolerances, do the steps 7 and 8 again until you have the correct load value.
(10)Install the floor panel 121GF on the door (Ref. 53-10-27, P. Block 401).
(11)Close the door.

G. Close-Up
(1)Retract the access ladder to avionics compartment (Ref. 53-11-70, P. Block 1).
(2)Make certain that the door opens and closes correctly.
(3)Carry out the door warning system test (Ref. 52-41-14, P. Block 501).
(4)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(5)Close the access door.

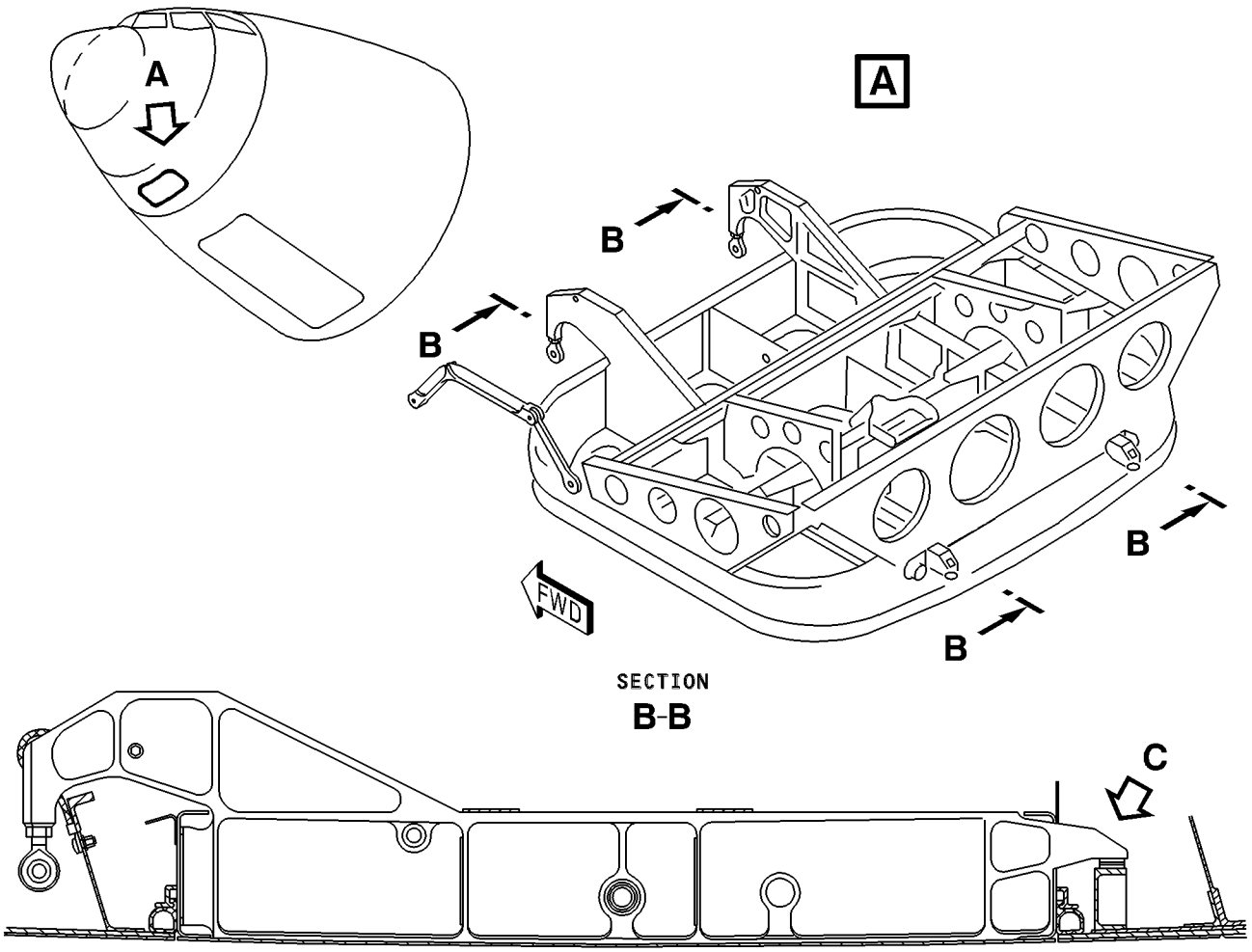


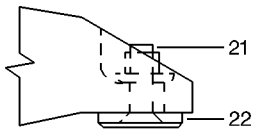
BM5 52 41 14 4 AAM0 13

Avionics Compartment Access Door
Figure 401



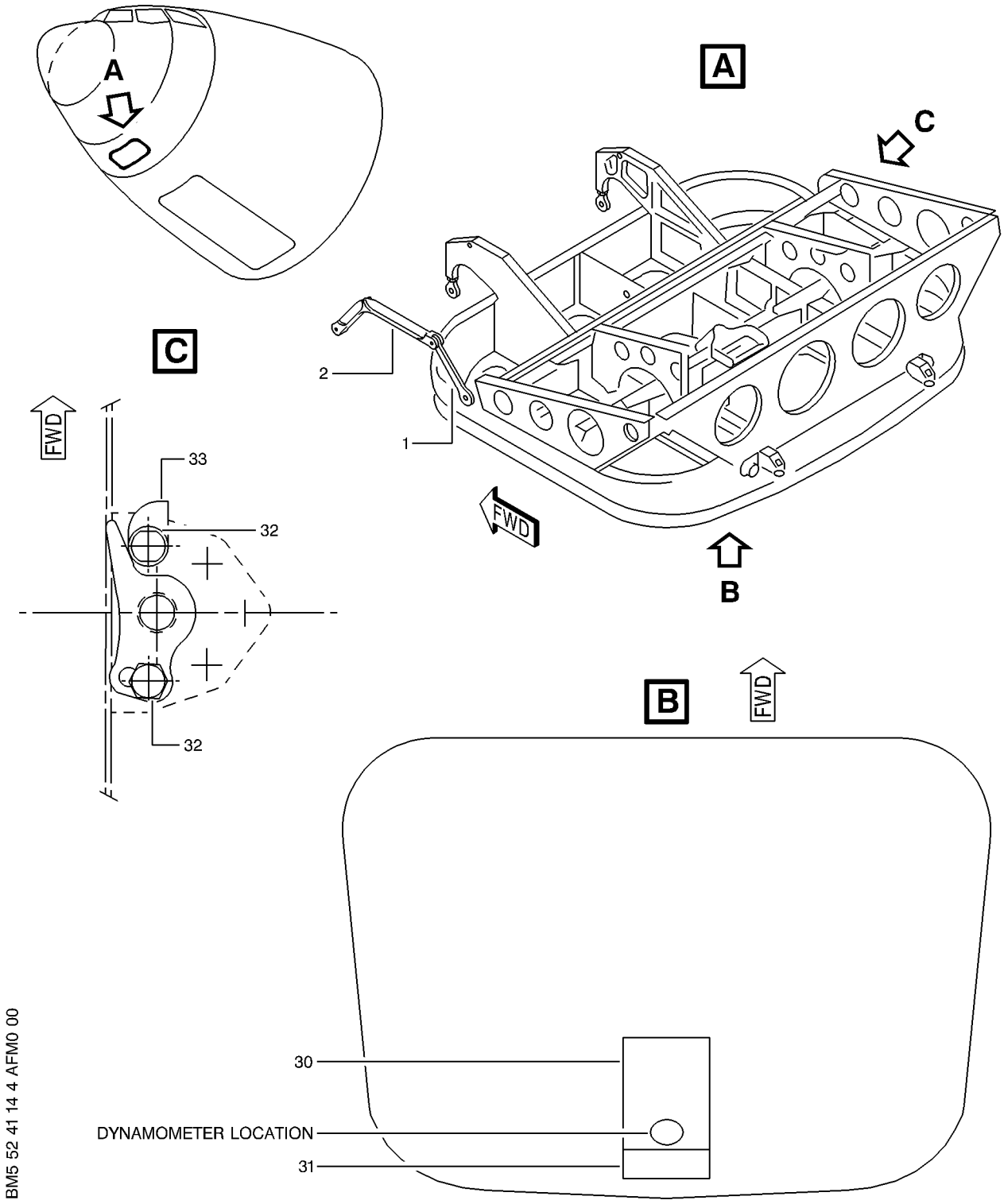
Avionics Compartment Access Door - Clearances
Figure 402





BM5 52 41 14 4 AEM0 00

Avionics Compartment Access Door - Adjustment
Figure 403



Avionics Compartment Access Door - Compensation Mechanism
Figure 404

1. Functional Test

A. Job Set-Up
To check that access door position (open/closed) indicating system operates correctly.

B. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedures	
R - 24-41-00, P. Block 301	AC External Power Control
- 31-51-00, P. Block 1	Ecam System

C. Job Set-Up
(1)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronic rack ventilation is correct.
(3)Make certain that the ECAM system circuit breakers are closed (Ref. 31-51-00, P. Block 1).
(4)On panel 11VU (5WW)
- If the ECAM display unit does not display the DOOR page, press the DOOR pushbutton switch.

D. Tests
(1)Open the door
(a)On CAPT and F/O main instrument panels 3VU and 5VU, MASTER CAUTION lights flash.
(b)On panel 4VU
1 On LH ECAM display unit 1WT, the indication EXT AVIONICS NOT CLOSED is displayed.
2 On RH ECAM display unit 3WT, the representation of access door and the AVIONIC indication are displayed in amber.
(c)The single stroke gong sounds.
(2)Close the door
(a)On CAPT and F/O main instrument panels 3VU and 5VU, MASTER CAUTION goes off.
(b)On panel 4VU
1 On LH ECAM display unit 1WT, the indication EXT AVIONICS NOT CLOSED goes off.
R 2 On RH ECAM display unit 3WT, the access door representation is
R displayed in green and the AVIONIC Indication is displayed in white.

E. Close-Up
(1)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

APU EXHAUST ACCESS FAIRING - REMOVAL/INSTALLATION

WARNING : BEFORE OPENING APU EXHAUST ACCESS FAIRING CHECK THAT THE EXHAUST DUCT IS SUFFICIENTLY COOLED.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 6.0 m (20 ft.)
B.	Tabwashers
C.	Circuit Breaker Safety Clips
D.	Cotter Pins
E.	Warning Notices

Referenced Procedure	
- 20-28-11, P. Block 1	Electrical Bonding

2. Procedure

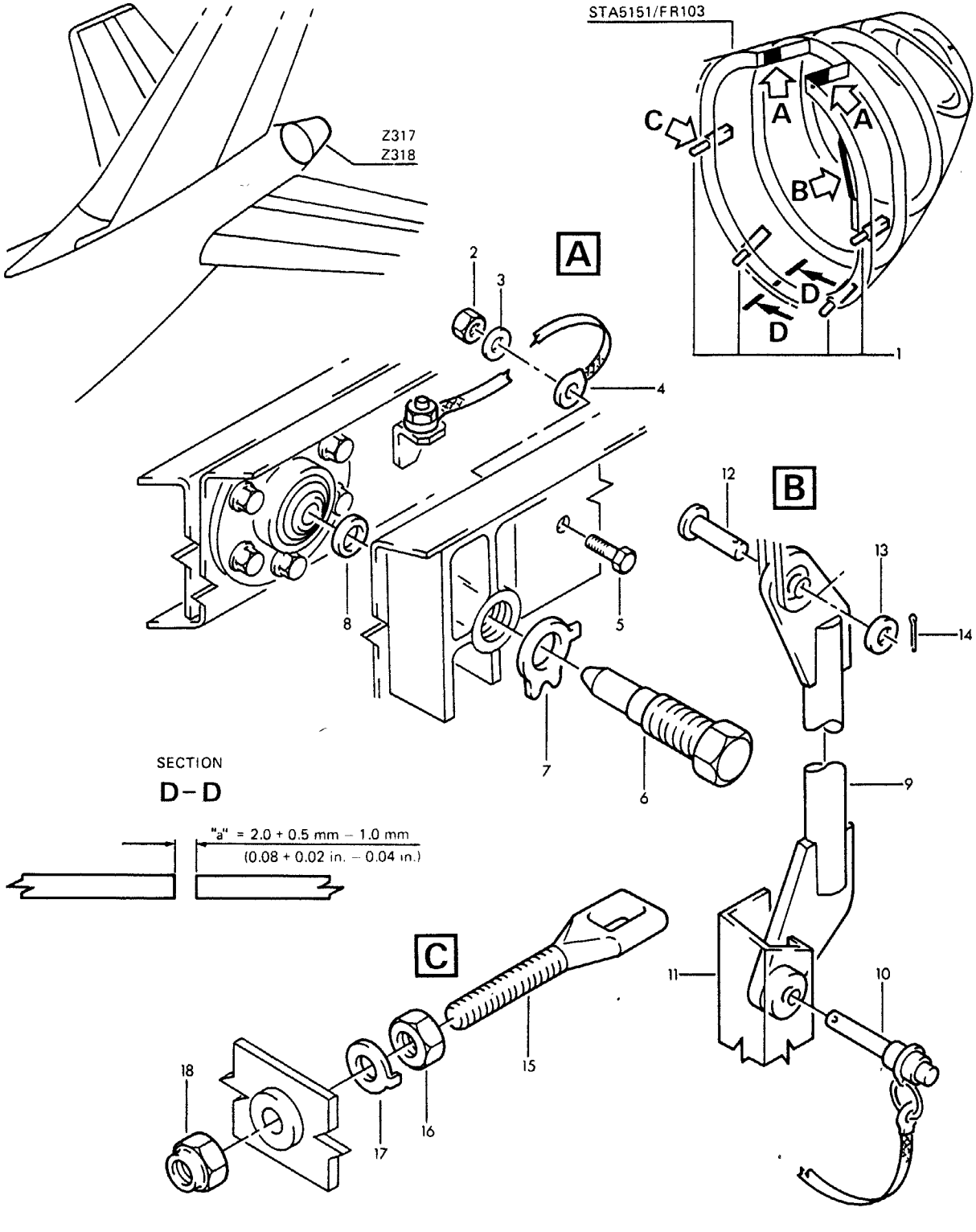
A. Job Set-Up
(1)Position access platform.
(2)Display warning notices in flight compartment, prohibiting start of APU.
(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
131VU	APU/ECB BACK/UP/SUPPLY	58KD	B52
131VU	APU/ECB SUPPLY/MAIN	1KD	B57

(4)Open and lock APU exhaust access fairing in fully open position.

B. Removal (Ref. Fig. 401)
(1)Remove nuts (2), washers (3) and bolts (5) and disconnect bonding straps (4).
(2)Release tabwashers (7) securing hinge pins (6).
(3)Support APU exhaust fairing and remove pip pin (10).
(4)Remove hinge pins (6), washers (8) and tabwashers (7).
(5)Remove APU exhaust access fairing including support strut (9).

C. Preparation for Installation (Ref. Fig. 401)
NOTE : Steps (1) and (2) are not applicable if original fairing is to be installed.
(1)Remove cotter pin (14), washer (13), clevis pin (12) and support strut (9).
(2)Position support strut (9) to replacement fairing and install clevis pin (12), washer (13) and cotter pin (14).



APU Exhaust Access Fairing
Figure 401

D. Installation (Ref. Fig. 401)
(1)Position and support APU exhaust access fairing and support strut (9).
(2)Install new tabwashers (7) on hinge pins (6) and install hinge pins (6) and washers (8) to APU exhaust access fairing.
NOTE : Make certain hinge pins (6) are correctly seated.
(3)Install pip pin (10) in guide (11).
(4)Close APU exhaust access fairing, lock quick-release fasteners (1) and check gap 'a'.
(a)Gap 'a' must be 2.0 +0.5 mm -1.0 mm (0.08 +0.02 in. -0.04 in.).
(b)Should stated limits be exceeded, adjust locking eye bolt (15) of quick-release fasteners (1) as follows:
1 Open and secure APU exhaust access fairing.
2 Remove nut (18), eye-bolt (15), tabwasher (17) and adjust eye-bolt (15) by turning nut (16) as required.
3 Install tabwasher (17), eye-bolt (15) and nut (18).
4 Repeat step (3) if necessary.
(5)Open APU exhaust access fairing and secure by installing pip pin (10) in guide (11).
(6)Safety tabwashers (7).
(7)Install bonding straps (4) with bolts (5), washers (3) and nuts (2). For electrical bonding refer to 20-28-11, P. Block 1.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove pip pin (10), stow support strut (9) and reinstall pip pin (10) in guide (11).
(3)Close APU exhaust access fairing and secure with quick-release fasteners (1).
(4)Remove safety clips and tags and close circuit breakers 1KD and 58KD.
(5)Remove warning notices.
(6)Remove access platform.

APU ACCESS DOORS - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal/installation of APU

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4.50 m (14.80 ft.)
B.	Circuit Breaker Safety Clips
C.	Cotter Pins
D.	Warning Notices
Referenced Procedure - 20-28-11, P. Block 1	Electrical Bonding

3. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Display warning notices in flight compartment, prohibiting start of APU.
(3)Open, safety and tag the following circuit breakers:

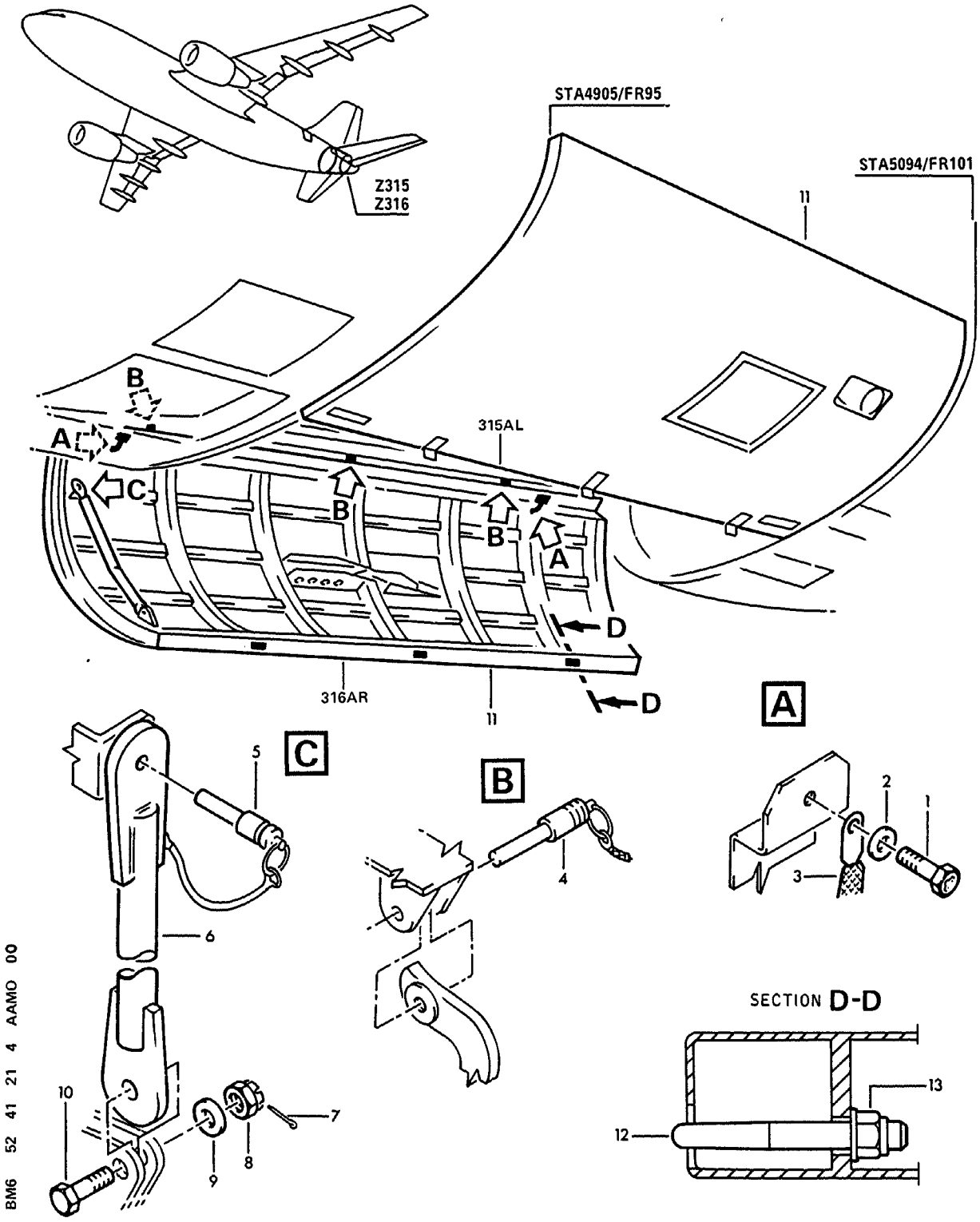
PANEL	SERVICE	IDENT.	LOCATION
131VU	APU/ECB BACK/UP/SUPPLY	58KD	B52
131VU	APU/ECB SUPPLY/MAIN	1KD	B57

(4)Open APU access doors.

B. Removal (Ref. Fig. 401)
NOTE : Doors are handed, procedure for only one door is described.
(1)Remove bolts (1), washers (2) and bonding straps (3).
(2)Support door, remove pip-pins (4) and door (11).

C. Preparation for Installation
(1)Check seals for good condition and replace as necessary.
NOTE : Steps (2) and (3) are not applicable if original door is to be installed.
(2)Remove pip-pin (5), cotter pin (7), nut (8), washer (9), bolt (10) and support strut (6).
(3)Position support strut (6) to replacement door, and install bolt (10), washer (9), nut (8), cotter pin (7) and pip-pin (5).

D. Installation (Ref. Fig. 401)
(1)Position door (11) and install pip-pins (4).
(2)Position support strut (6) and install pip-pin (5).
(3)Position bonding straps (3), washers (2) and install bolts (1).
For electrical bonding refer to 20-28-11, P. Block 1.



APU Access Doors
Figure 401

(4)Close APU access doors.
(a)Make certain that locking hooks of quick-release fasteners are correctly engaged in the locking eye-bolts (12). If hooks do not engage eye-bolts (12), adjust eye-bolts (12) as follows:
1 Open APU access doors.
2 Remove nuts (13) and adjust eye-bolt (12) by turning eye-bolt (12) as required.
3 Install nut (13).
4 Repeat step (4) if necessary.
(5)Open APU access doors.

E. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)Close APU access doors.
(3)Remove access platform.
(4)Remove warning notices.
(5)Remove safety clips and tags and close circuit breakers 1KD and 58KD.

SERVICE DOORS - DESCRIPTION AND OPERATION

1. General

The service doors are provided to give access to the system and equipment to be serviced.

2. Component Location

(Ref. Fig. 001)

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
	121CL	DOOR-FWD JACKING POINT RECEPTACLE		121		52-42-00
	121EL	DOOR-GROUND ELECTRICAL POWER RECEPTACLE		121		52-42-00
	122CR	DOOR-FWD CARGO COMPT. DOOR CONTROL		122		52-42-00
	132AR	DOOR-FWD CARGO COMPT. ACCESS		132		52-42-00
	134BR	DOOR-FWD CARGO COMPT. ACCESS		134		52-42-00
	135BL	DOOR-GROUND AIR CONDITIONING		135		52-42-00
	136BR	DOOR-POTABLE WATER SERVICE		136		52-42-00
	144BR	DOOR-GROUND AIR CONDIT. AND AIR STARTING		144		52-42-00
R	144DR	DOOR-REFUEL/DEFUEL PANEL	110VU	144		52-42-00
	152AR	DOOR-AFT CARGO COMPT. ACCESS		152		52-42-00
	153AL	DOOR-FRESH WATER DRAIN		153		52-42-00
	154AR	DOOR-AFT CARGO COMPT. ACCESS		154		52-42-00
	171BL	DOOR-TOILET SERVICE PANEL		171		52-42-00
	677CR	DOOR-AFT CARGO COMPT. DOOR CONTROL		677		52-42-00

3. Component Description

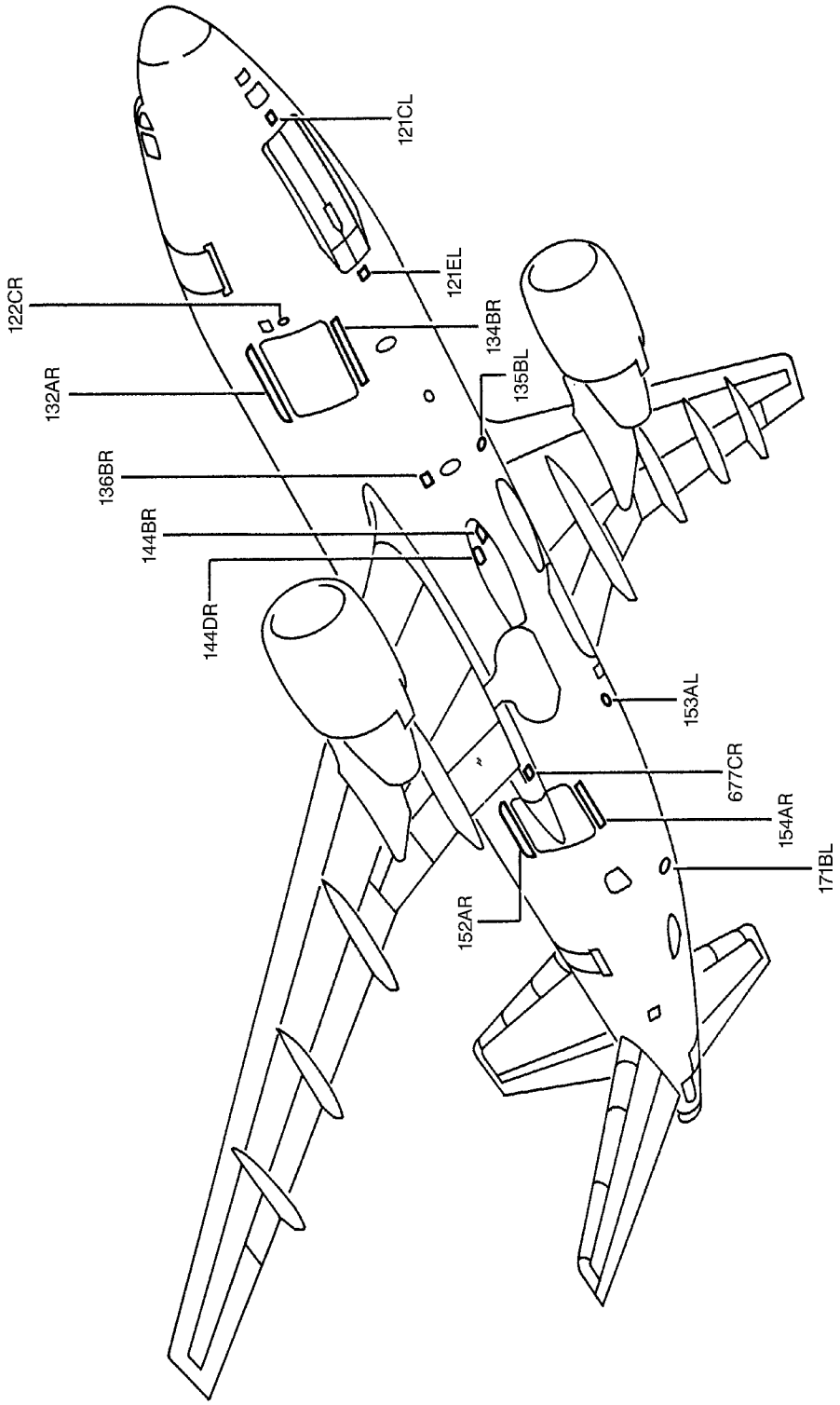
A. FWD Jacking Point Receptacle Door 121CL
(Ref. Fig. 002)
The door, located in the lower fuselage between STA995/FR10A and STA1019/FR11, is flush with the fuselage and provides access to the aircraft forward jacking point.

(1) Description and Operation
The door, constructed from light alloy, consists of a machined sheet supporting two DZUS fastener receptacles and two latches. A hinge, mounted in a recess in the structure, is riveted to the door.
The two latches complete with DZUS fasteners are hinged to the door. When the door is closed, the latches engage with retaining fittings attached to the structure and are secured with DZUS fasteners.
A spring, located at the hinge, assists in rapid opening and holds the door in the open position.

B. Not applicable

C. Ground Electrical Power Receptacle Door 121EL

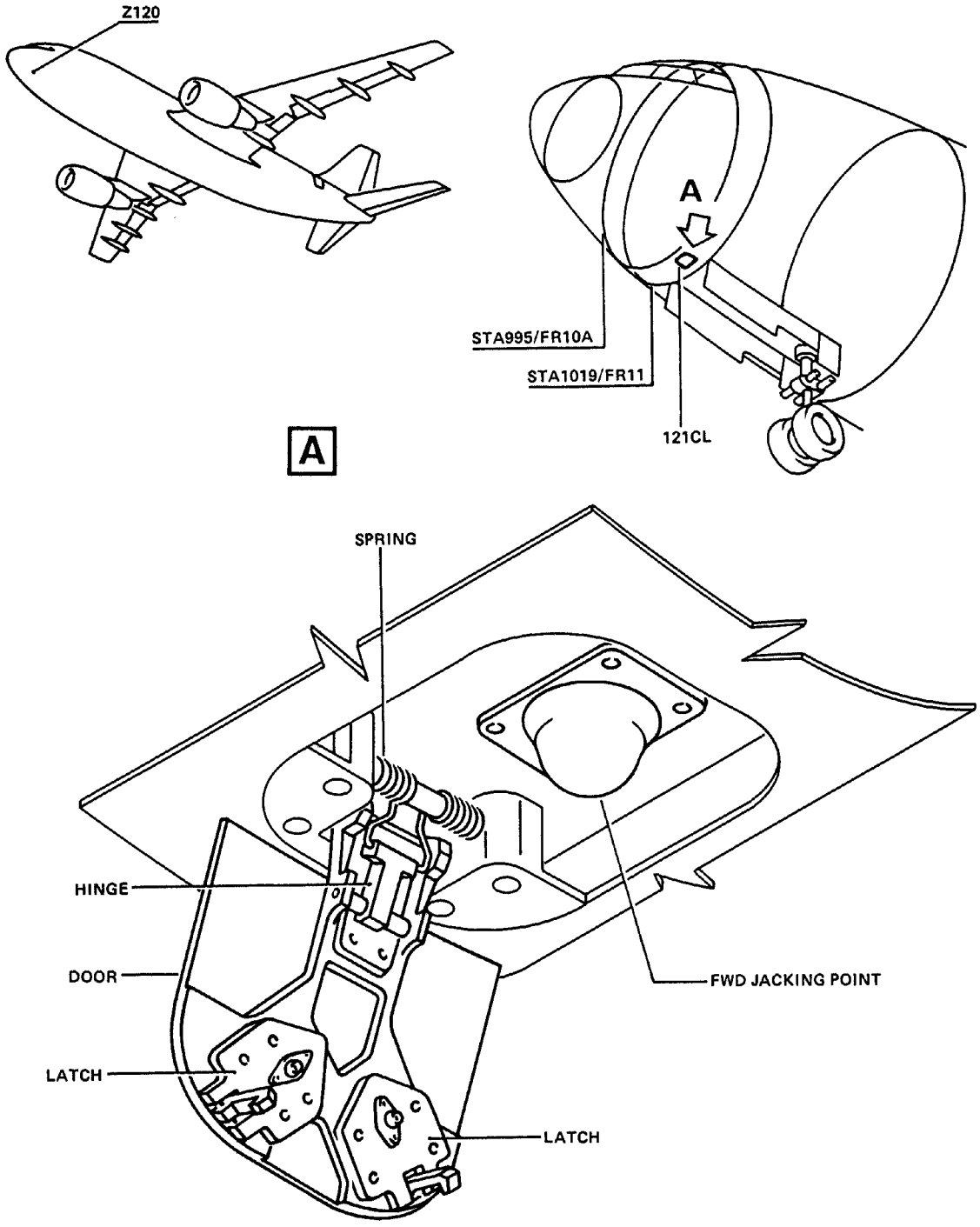
(1) General
The ground electrical power receptacle door is located on the FWD fuselage section 12. It is shaped to the contour of the fuselage and



BM6 52 42 00 0 AAF0 01

Component Location
Figure 001

R



BM3 52 42 00 0 ACM0 00

FWD Jacking Point Receptacle Door 121CL
Figure 002

provides access to the ground electrical power receptacles. The door opens outwards, towards the front of the aircraft.

D. FWD Cargo Compartment Door Control Door 122CR
(Ref. Fig. 003)

(1)General

When closed, the door, located in the lower fuselage between STA1340/FR18 and STA1393/FR19, is flush with the fuselage contours and provides access to the cargo door control panel.

(2)Description

The door, constructed from light alloy, consists of a shaped plate chemically etched to accommodate hinges, a latch mechanism and spring a spring rod assembly.

The door is attached to the fuselage by a hinge and a spring retaining mechanism.

The door is locked by a single latch mechanism, the locking pin of which engages with a retaining catch in the fuselage.

The spring rod assembly is attached to brackets on the door and fuselage. It consists of a spring and a shaft which pivots between the brackets forming an overcenter device which retains the door in the fully open position and assists in closing the door.

E. AFT Cargo Compartment Door Control Door 677CR
(Ref. Fig. 004)

When closed, the door, located in the fuselage wing fairing between STA3143/FR55/58 and STA3196/FR59, is flush with the fuselage wing fairing contour and provides access to the cargo door control panel.

(1)Description

The door, constructed from light alloy, consists of a shaped plate chemically etched to accommodate hinges, a latch mechanism and a spring rod assembly.

The door is attached to the fuselage wing fairing by hinges and a spring rod assembly.

The door is locked by a single latch mechanism, the locking pin of which engages with a retaining catch in the fuselage.

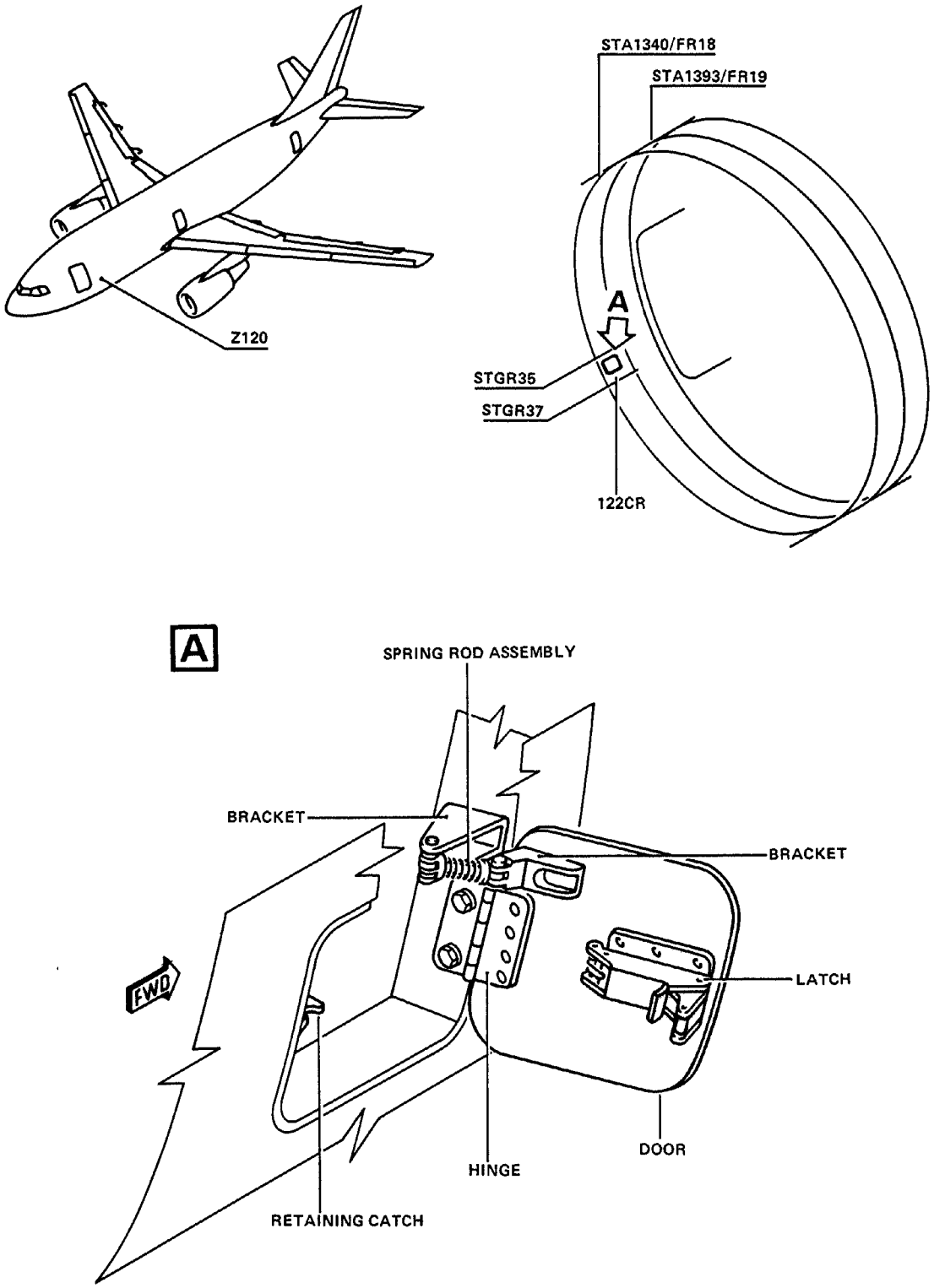
The spring rod assembly is attached to brackets on the door and fuselage. It consists of a spring and a shaft which pivots between the brackets forming an overcenter device which retains the door in the fully open position and assists in closing the door.

F. FWD and AFT Cargo Compartment Access Doors 132AR, 134BR, 152AR, 154AR
(Ref. Fig. 005)
(Ref. Fig. 006)
(Ref. Fig. 007)
(Ref. Fig. 008)

The doors, located in the outer fuselage skin above and below cargo compartment doors 811 and 812, are adapted to the fuselage contour and provide access to the suspension of the cargo compartment doors.

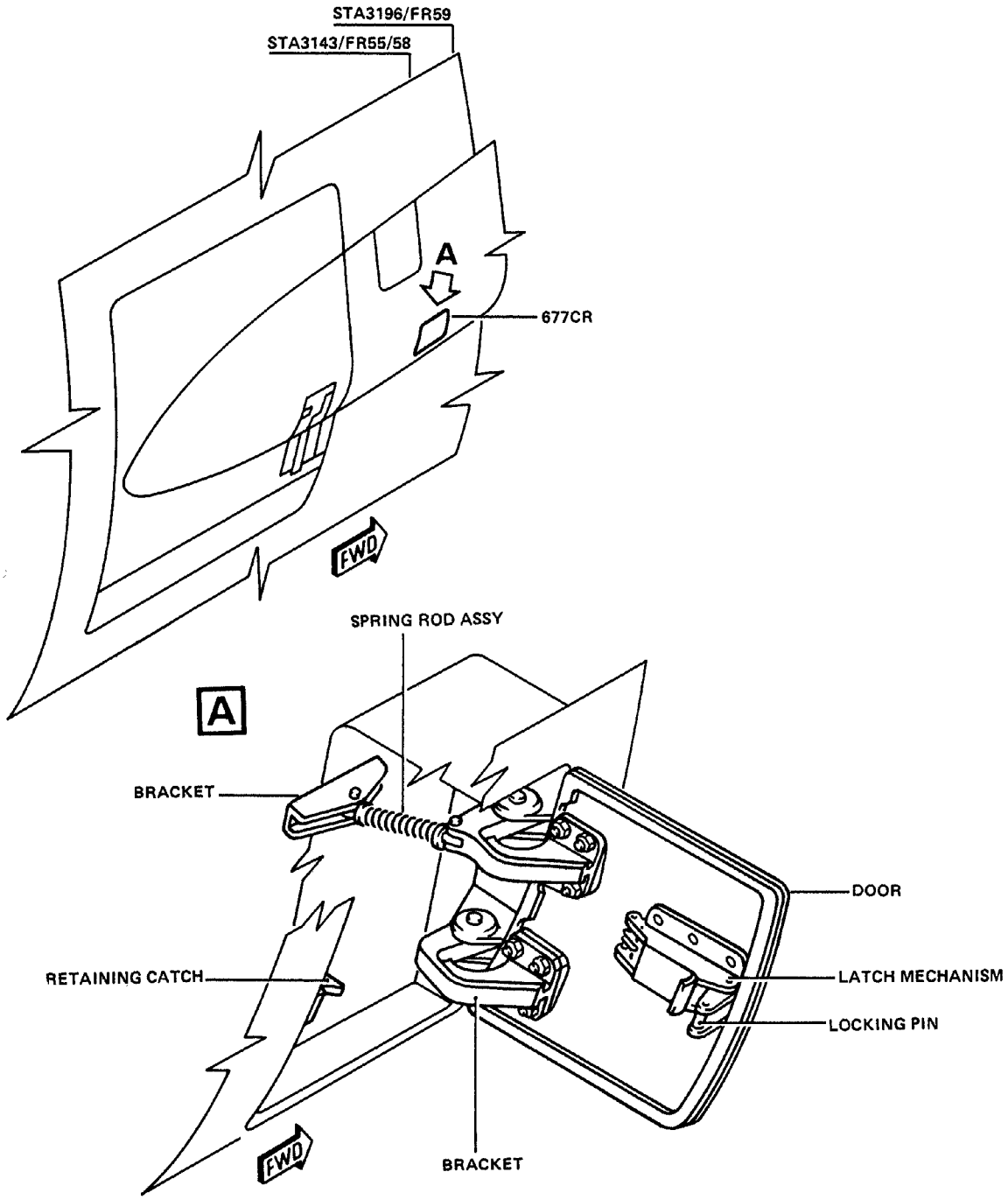
(1)Description

Each door is constructed from sheet metal and forms a blanking plate which is adapted to the fuselage shape.



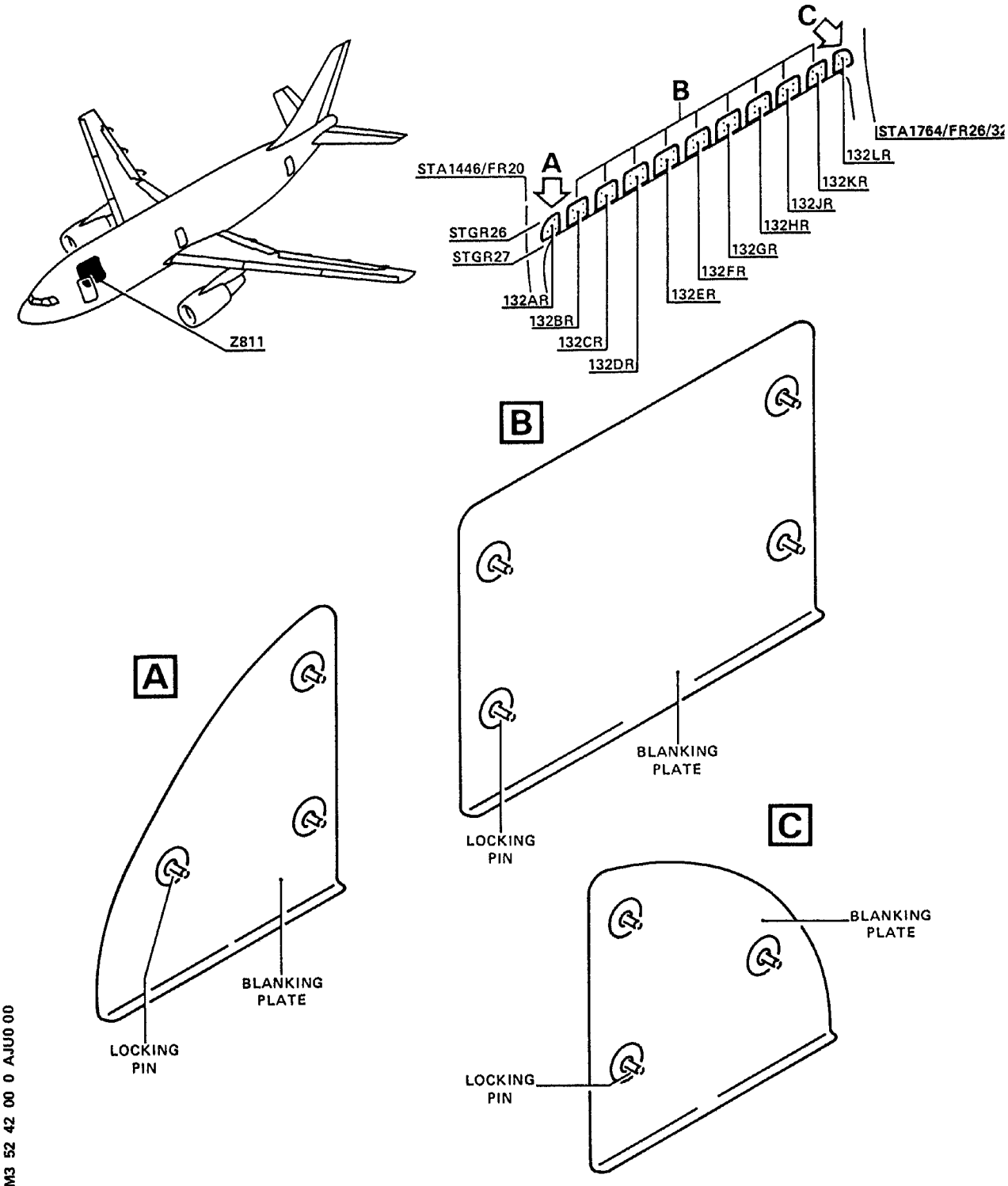
BM3 52 42 00 0 AGM0 00

Cargo Compartment Door Control Panel Door 122CR
Figure 003

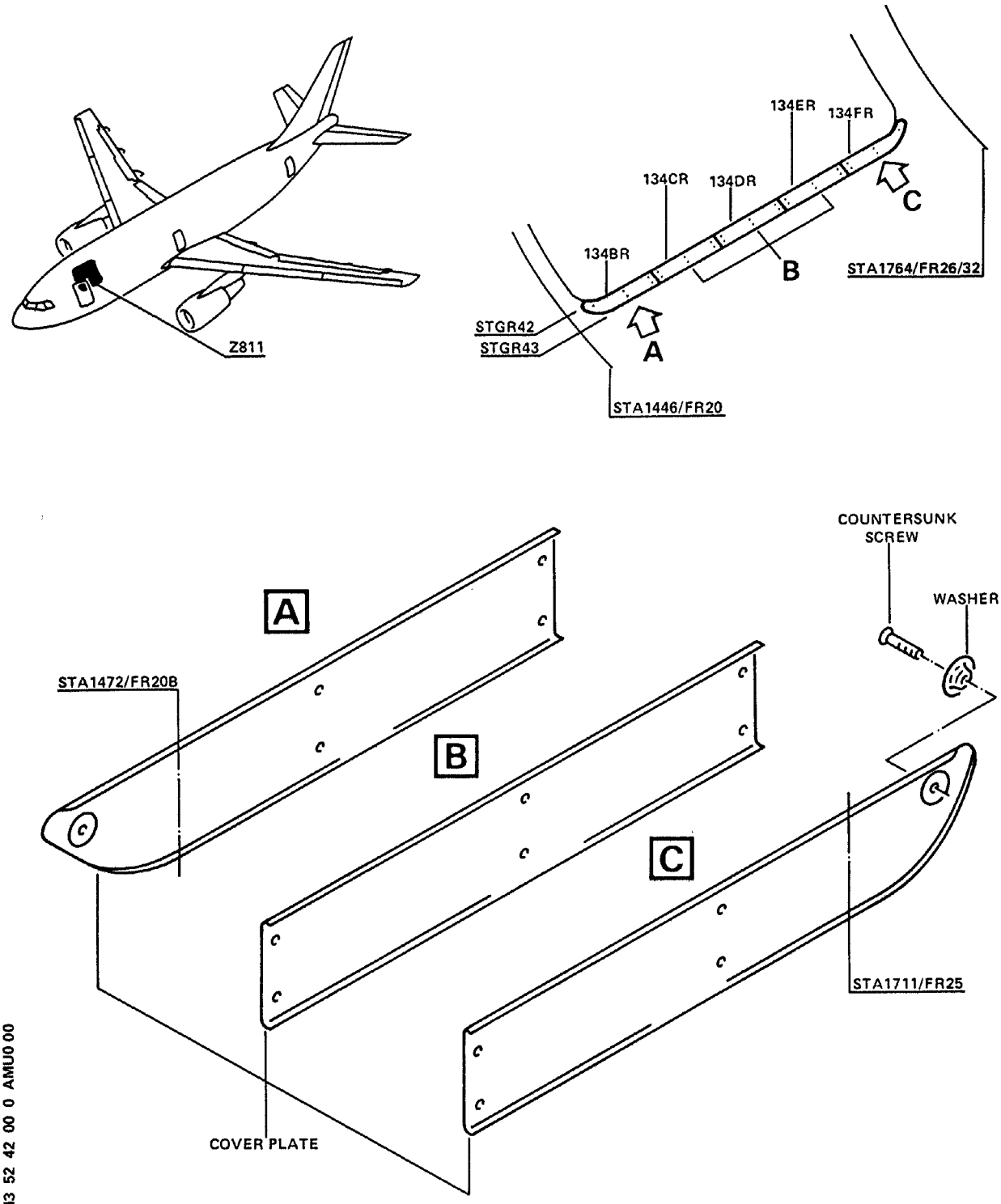


BM3 52 42 00 0 AHM0 00

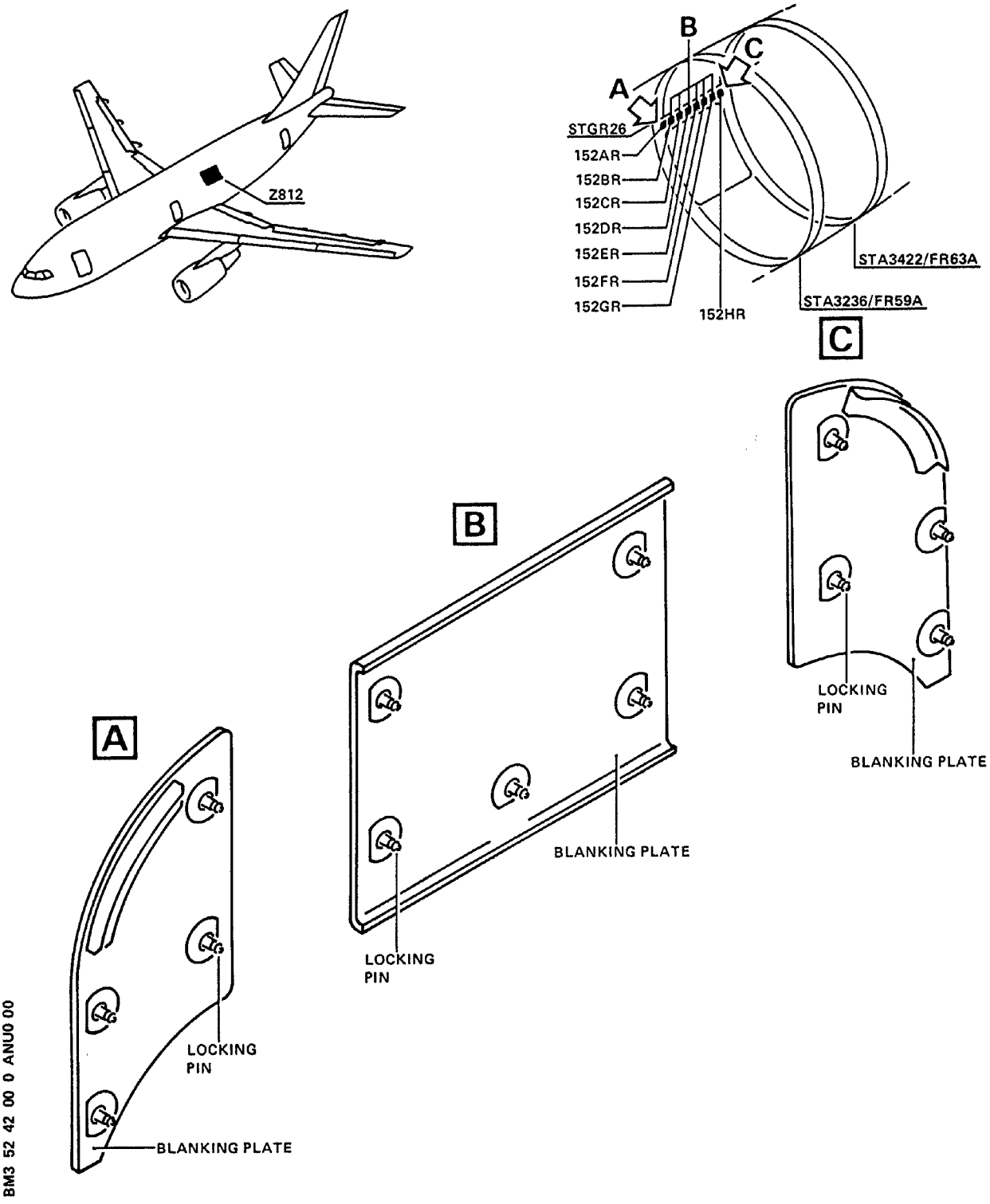
Cargo Compartment Door Control Door 677CR
Figure 004



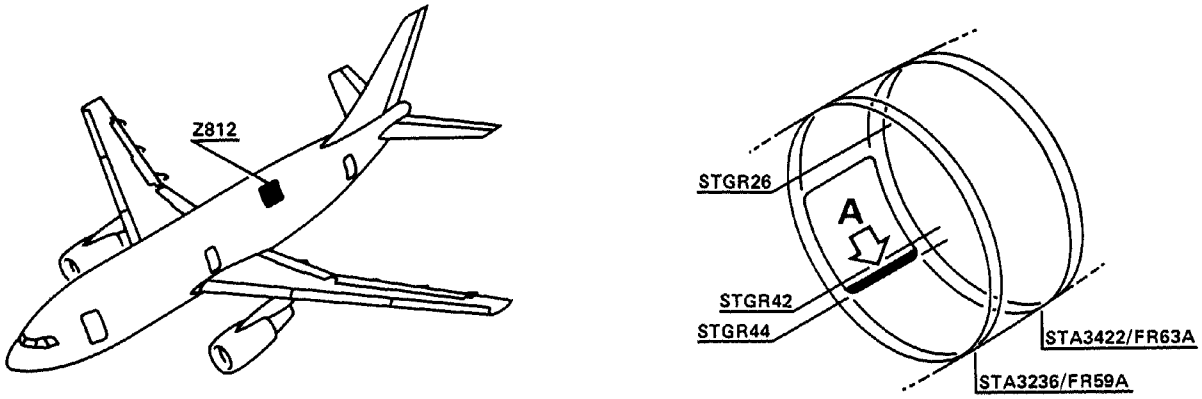
FWD Cargo Compartment Door - Upper Access Doors
132AR to 132LR
Figure 005

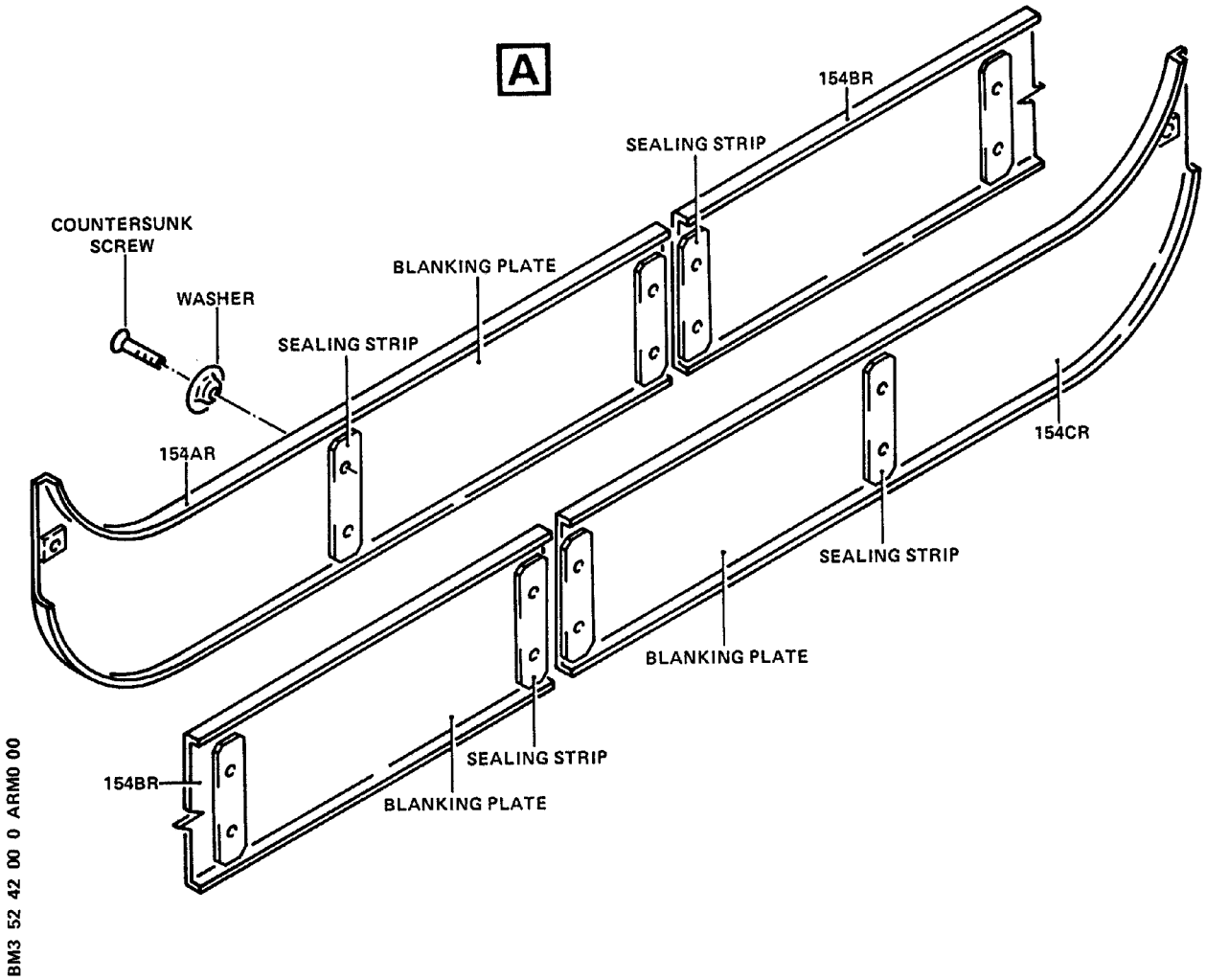


FWD Cargo Compartment Door - Lower Access Doors
134BR to 134FR
Figure 006



AFT Cargo Compartment Door - Upper Access Doors
152AR to 152HR
Figure 007





AFT Cargo Compartment Door - Lower Access Doors
154AR to 154CR
Figure 008

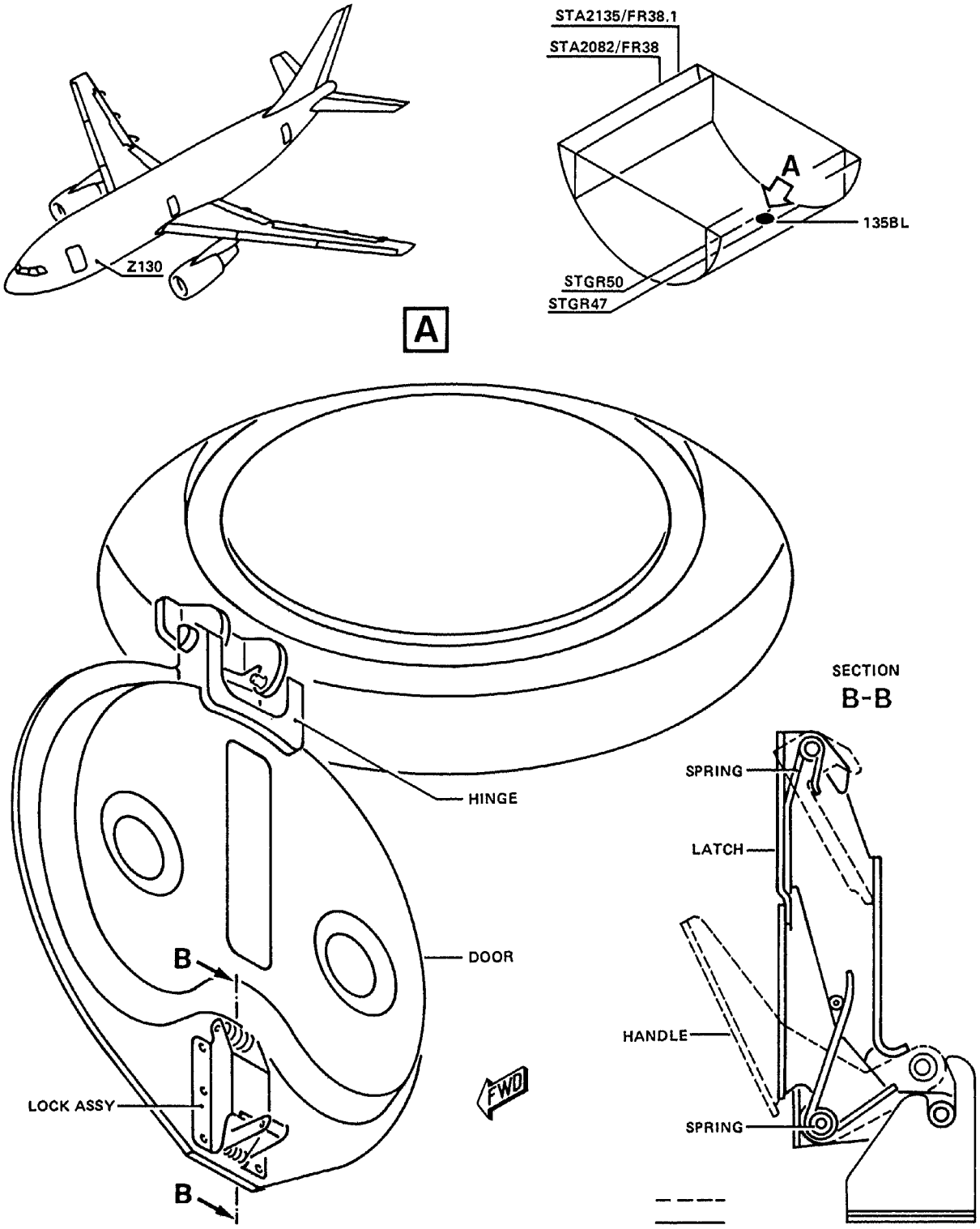
The doors are attached to the structure with securing devices.
(Ref. Fig. 009)
(Ref. Fig. 010)
(Ref. Fig. 011)
(Ref. Fig. 012)

R **ON A/C 001-005, 103-103,

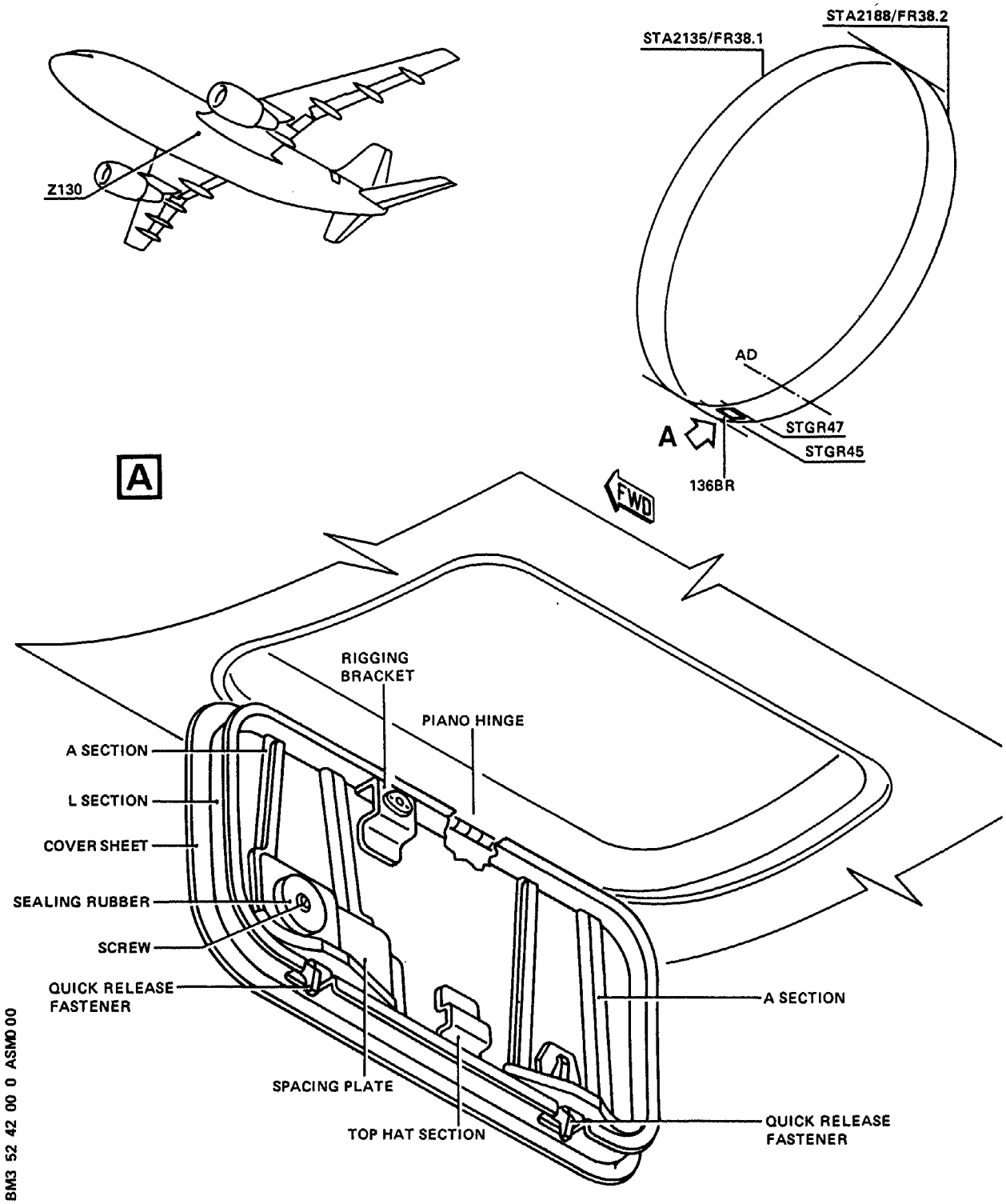
G. LP Ground Air Conditioning Door 135BL
(Ref. Fig. 009)
The door, located in the lower surface of the front fuselage outer skin between STA2082/FR38 and STA2135/FR38.1, is framed to the fuselage contour and gives access to the aircraft air conditioning system ground service air connection.
(1)Description and Operation
The supporting structure of the door is a riveted assembly of light alloy components consisting of inner and outer skin panels reinforced with stiffeners.
A hinge is riveted to the door and screwed to the fuselage structure.
A lock assy attached to the door comprises a spring-loaded handle and a spring-loaded latch housed in a latch body. When the door is closed, a locking pin integral with the handle engages with a retaining catch attached to the structure. The door handle and latch are then flush with the door outer skin.

H. Potable Water Service Door 136BR
(Ref. Fig. 010)
The door, located in the outer skin of the lower fuselage between STA2135/FR38.1 and STA2188/FR38.2, is adapted to the fuselage contour and provides access to the potable water system.
(1)Description
(a)Structure
The door, constructed from light alloy, consists of a cover sheet, a piano hinge and two quick release fasteners. The door structure is reinforced by an L-section around the cover sheet boundary and two A-sections.
A rigging bracket and a top-hat section are riveted between the A- sections on the cover sheet.
A spacing plate supports a sealing rubber which, when the door is closed, blanks off the system overflow pipe. The sealing rubber is screwed to the spacing plate.
(b)Suspension
The piano hinge, riveted to the outer surface of the cover sheet and the L-section, is attached to the fuselage structure with countersunk screws. Two quick release fasteners, the levers of which engage with lugs in the door frame, are used for locking the door.

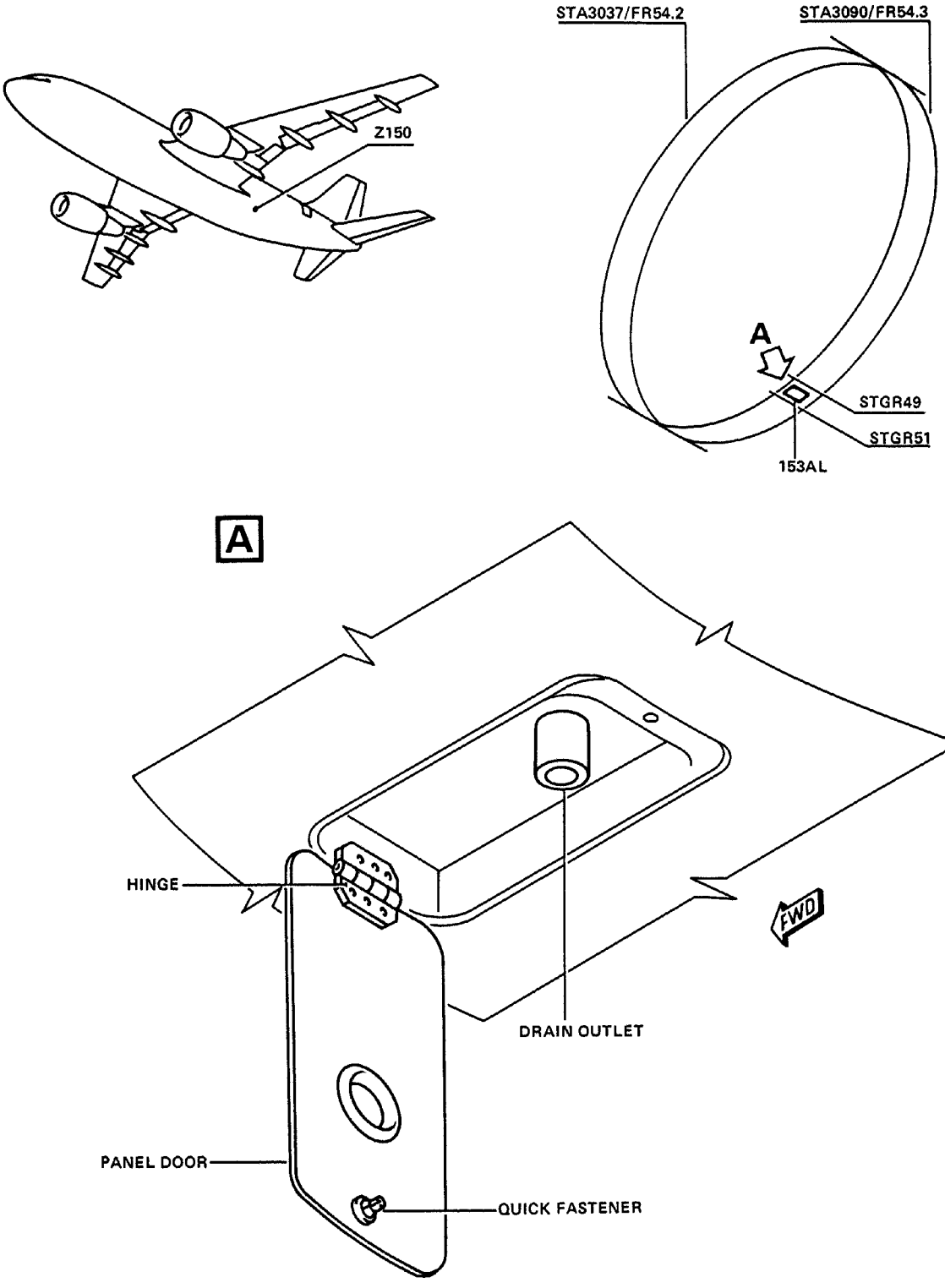
J. HP Ground Air Conditioning and Air Starting Door 144BR
The door is located in the lower surface of the mid-fuselage between STA2612/FR40 and STA2665/FR41. It is hinged to the air condition



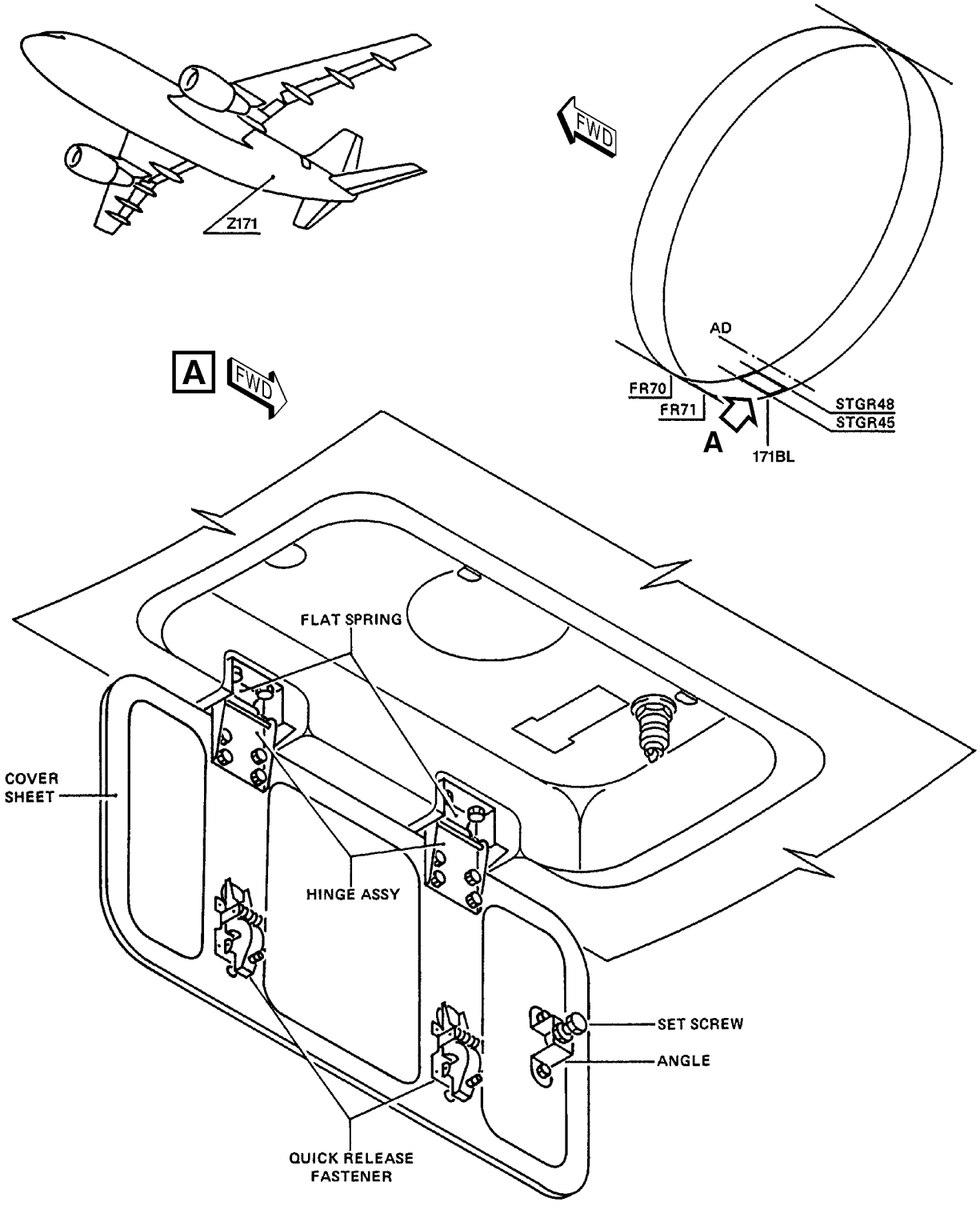
LP Ground Air Conditioning Door 135BL
Figure 009



Potable Water Service Door 136BR
Figure 010



Fresh Water Drain Door 153AL
Figure 011



Toilet Service Panel Door 171BL
Figure 012

R

fairing and is flush to the adjacent skin when closed. It gives access to the aircraft ground air conditioning and air starting connections. The door is made of laminated material with integral stiffeners. A hinge is riveted to the lower end of the door and screwed to the air conditioning fairing. A seal lip is bonded to the top end of the door. The lock assemblies attached to the door sides comprise each of a spring loaded locking lever and a spring loaded latch, housed in a latch body. When the door is closed, the locking lever engages with a retaining catch, attached to the air condition fairing structure. The locking lever and latch are then flush with the door outer skin.

K. Refuel/Defuel Panel 110VU 144DR

The door is located in the lower surface of the mid-fuselage between STA2665/FR41 and STA2718/FR42. It is hinged to the air condition fairing and is flush to the adjacent skin when closed. It gives access to the aircraft Refuel/Defuel Panel 110VU. The door is made of laminated material with integral stiffeners. A hinge is riveted to the top end of the door and screwed to the air conditioning fairing. A seal lip is bonded to the lower end of the door. Two lock assemblies attached to the door sides comprise each of a spring-loaded locking lever and a spring-loaded latch, housed in a latch body. When the door is closed, the locking lever engages with a retaining catch, attached to the air condition fairing structure. The locking lever and latch are then flush with the door outer skin.

L. Fresh Water Drain Door 153AL

(Ref. Fig. 011)

The door accommodating the aft potable water drain outlet is situated in the lower fuselage between STA3037/FR54.2 and STA3090/FR54.3. As the water drain outlet protrudes through a hole in the door panel, the door remains closed during water draining operations.

(1)Description

The door, constructed from light alloy, consists of a single thickness panel contoured to the fuselage with a dished circular cutout accommodating the end of the fresh water drain pipe.

Attachment consists of a single hinge riveted to the door and fuselage. The door is locked by a captive quick fastener, engaging with an anchor nut in the fuselage structure.

R M. Toilet Service Panel Door 171BL

(Ref. Fig. 012)

The toilet service panel door, located in the outer skin of the lower fuselage between STA3779/FR70 and STA3832/FR71, is adapted to the fuselage contour and provides access to the toilet service panel.

(1)Description

The toilet service panel door, constructed from light alloy, consists of a chemically etched cover sheet, two hinge assemblies, an angle and two quick-release fasteners. The hinge assemblies are riveted to the cover sheet and screwed to the toilet service panel hood.

Two flat springs are installed between the waste service panel hood and the hinge assemblies. The flat springs hold the toilet service

panel door in the open position.
The angle is equipped with a set screw and a nut. When the toilet service panel door is closed, the set screw contacts a limit switch.

R **ON A/C 006-102, 104-200,

G. LP Ground Air Conditioning Door 135BL
(Ref. Fig. 009)
The door, located in the lower surface of the front fuselage outer skin between STA2082/FR38 and STA2135/FR38.1, are framed to the fuselage contour and give access to the aircraft air conditioning system ground service air connection.
A mechanical safety device (Ground Air Supply Blocking Device) is installed to prevent opening of the service door 135BL for the ground air supply, until the service door 136AR is removed. The operation of the safety device is described in Ref. AMM 52-41-00.
(1)Description and Operation
The supporting structure of the door is a riveted assembly of light alloy components consisting of inner and outer skin panels reinforced with stiffeners.
A hinge is riveted to the door and screwed to the fuselage structure.
A lock assy attached to the door comprises a spring-loaded handle and a spring-loaded latch housed in a latch body. When the door is closed, a locking pin integral with the handle engages with a retaining catch attached to the structure. The door handle and latch are then flush with the door outer skin.

H. Potable Water Service Door 136BR
(Ref. Fig. 010)
The door, located in the outer skin of the lower fuselage between STA2135/FR38.1 and STA2188/FR38.2, is adapted to the fuselage contour and provides access to the potable water system.
(1)Description
(a)Structure
The door, constructed from light alloy, consists of a cover sheet, a piano hinge and two quick release fasteners. The door structure is reinforced by an L-section around the cover sheet boundary and two A-sections.
A rigging bracket and a top-hat section are riveted between the A- sections on the cover sheet.
A spacing plate supports a sealing rubber which, when the door is closed, blanks off the system overflow pipe. The sealing rubber is screwed to the spacing plate.
(b)Suspension
The piano hinge, riveted to the outer surface of the cover sheet and the L-section, is attached to the fuselage structure with countersunk screws. Two quick release fasteners, the levers of which engage with lugs in the door frame, are used for locking the door.

J. Ground Air Conditioning and Air Starting Door 144BR

The door is located in the lower surface of the mid-fuselage between STA2612/FR40 and STA2665/FR41. It is hinged to the air condition fairing and is flush to the adjacent skin when closed. It gives access to the aircraft ground air conditioning and air starting connections. The door is made of laminated material with integral stiffeners. A hinge is riveted to the lower end of the door and screwed to the air conditioning fairing. A seal lip is bonded to the top end of the door. The lock assemblies attached to the door sides comprise each of a spring loaded locking lever and a spring loaded latch, housed in a latch body. When the door is closed, the locking lever engages with a retaining catch, attached to the air condition fairing structure. The locking lever and latch are then flush with the door outer skin.

K. Refuel/Defuel Panel 110VU 144DR

The door is located in the lower surface of the mid-fuselage between STA2665/FR41 and STA2718/FR42. It is hinged to the air condition fairing and is flush to the adjacent skin when closed. It gives access to the aircraft Refuel/Defuel Panel 110VU. The door is made of laminated material with integral stiffeners. A hinge is riveted to the top end of the door and screwed to the air conditioning fairing. A seal lip is bonded to the lower end of the door. Two lock assemblies attached to the door sides comprise each of a spring-loaded locking lever and a spring-loaded latch, housed in a latch body. When the door is closed, the locking lever engages with a retaining catch, attached to the air condition fairing structure. The locking lever and latch are then flush with the door outer skin.

L. Fresh Water Drain Door 153AL

(Ref. Fig. 011)

The door accommodating the aft potable water drain outlet is situated in the lower fuselage between STA3037/FR54.2 and STA3090/FR54.3. As the water drain outlet protrudes through a hole in the door panel, the door remains closed during water draining operations.

(1)Description

The door, constructed from light alloy, consists of a single thickness panel contoured to the fuselage with a dished circular cutout accommodating the end of the fresh water drain pipe.

Attachment consists of a single hinge riveted to the door and fuselage. The door is locked by a captive quick fastener, engaging with an anchor nut in the fuselage structure.

R M. Toilet Service Panel Door 171BL

(Ref. Fig. 012)

The toilet service panel door, located in the outer skin of the lower fuselage between STA3779/FR70 and STA3832/FR71, is adapted to the fuselage contour and provides access to the toilet service panel.

(1)Description

The toilet service panel door, constructed from light alloy, consists of a chemically etched cover sheet, two hinge assemblies, an angle and two quick-release fasteners. The hinge assemblies are riveted to the cover sheet and screwed to the toilet service panel hood.

Two flat springs are installed between the waste service panel hood and the hinge assemblies. The flat springs hold the toilet service panel door in the open position.
The angle is equipped with a set screw and a nut. When the toilet service panel door is closed, the set screw contacts a limit switch.

SERVICE DOORS - INSPECTION/CHECK

1. Reason for the Job

A. Inspection of the service doors 144BR and/or 144DR and the related fuselage structure

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 1.5 m (4.92 ft.)

3. Procedure

A. Job Set-Up
(1)Position the access platform below the service doors 144BR and/or 144DR.
(2)Open the service doors 144BR and/or 144DR.

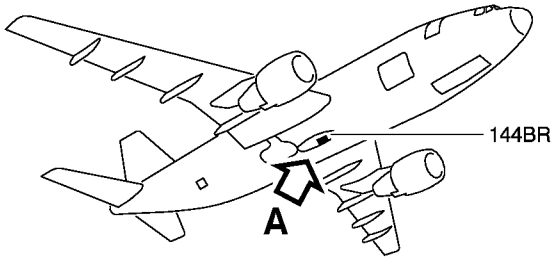
B. Removal
(Ref. Fig. 601)
(Ref. Fig. 602)
(1)Inspect the applicable service door from both sides and make sure that:
- the service door and the related hinge do not have any deformation
- the service door and the related hinge are not worn
- the external paint is not damaged
- the door seal is not damaged.

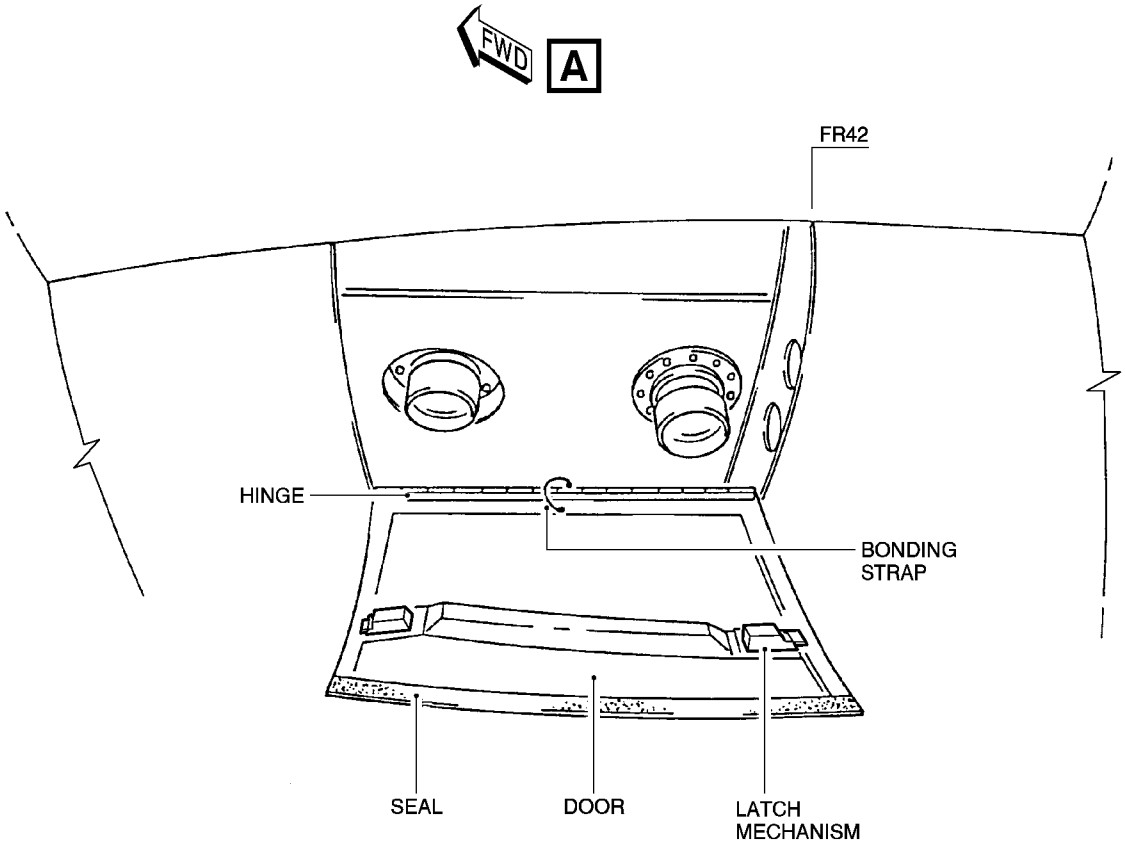
(2)Manually move the service door in the forward and rearward direction and make sure that:
- there is no play between both hinge halves
- the security of the attachment parts is correct.

(3)Open and close the service door several times and make sure that:
- the hinge operates smoothly
- the latch mechanism operates satisfactorily.

(4)Close the service door and make sure that:
- the latch mechanisms engage correctly with the related fuselage fittings
- the surfaces of the service door are in line with the surrounding fuselage.

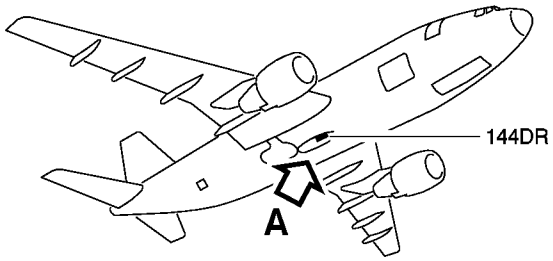
C. Close-Up
(1)Make sure that the working area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove access platform.

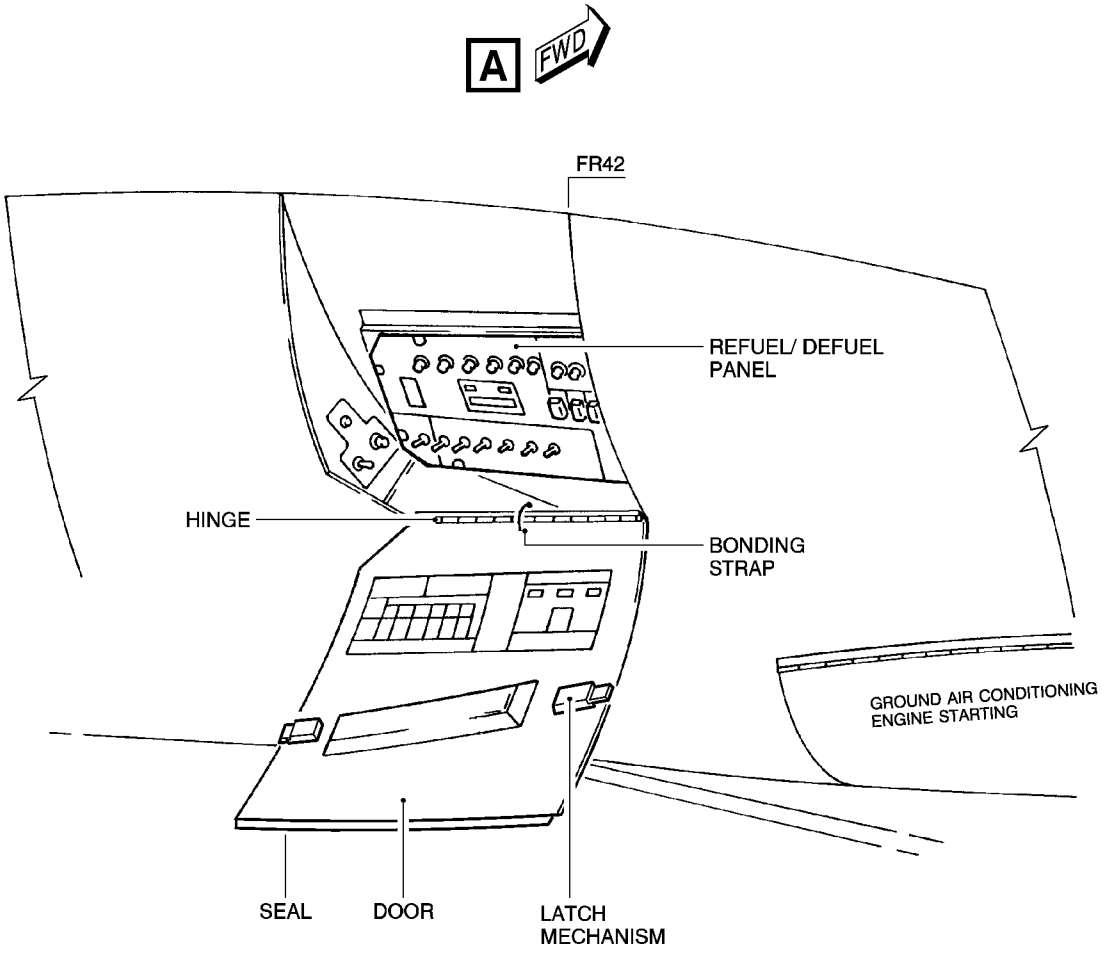




BM6 52 42 00 6 AAU0 00

Service Door 144BR
Figure 601





BM6 52 42 00 6 ACU0 00

Service Door 144DR
Figure 602

POTABLE WATER SERVICE DOOR - REMOVAL/INSTALLATION

1. Equipment and Material

ITEM	DESIGNATION
A.	Access Platform, 1.5 m (4.92 ft.)
B. Material No. 09-005	Sealants (Ref. 20-31-00)
C. Material No. 09-013	Sealants (Ref. 20-31-00)
D. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
E. Material No. 16-001	Structure Paints (Ref. 20-31-00)

Referenced Procedures

- 51-74-10, P. Block 801	Removal of Corrosion
- 51-75-10, P. Block 801	Repair of Paint Coatings

2. Procedure

(Ref. Fig. 401)

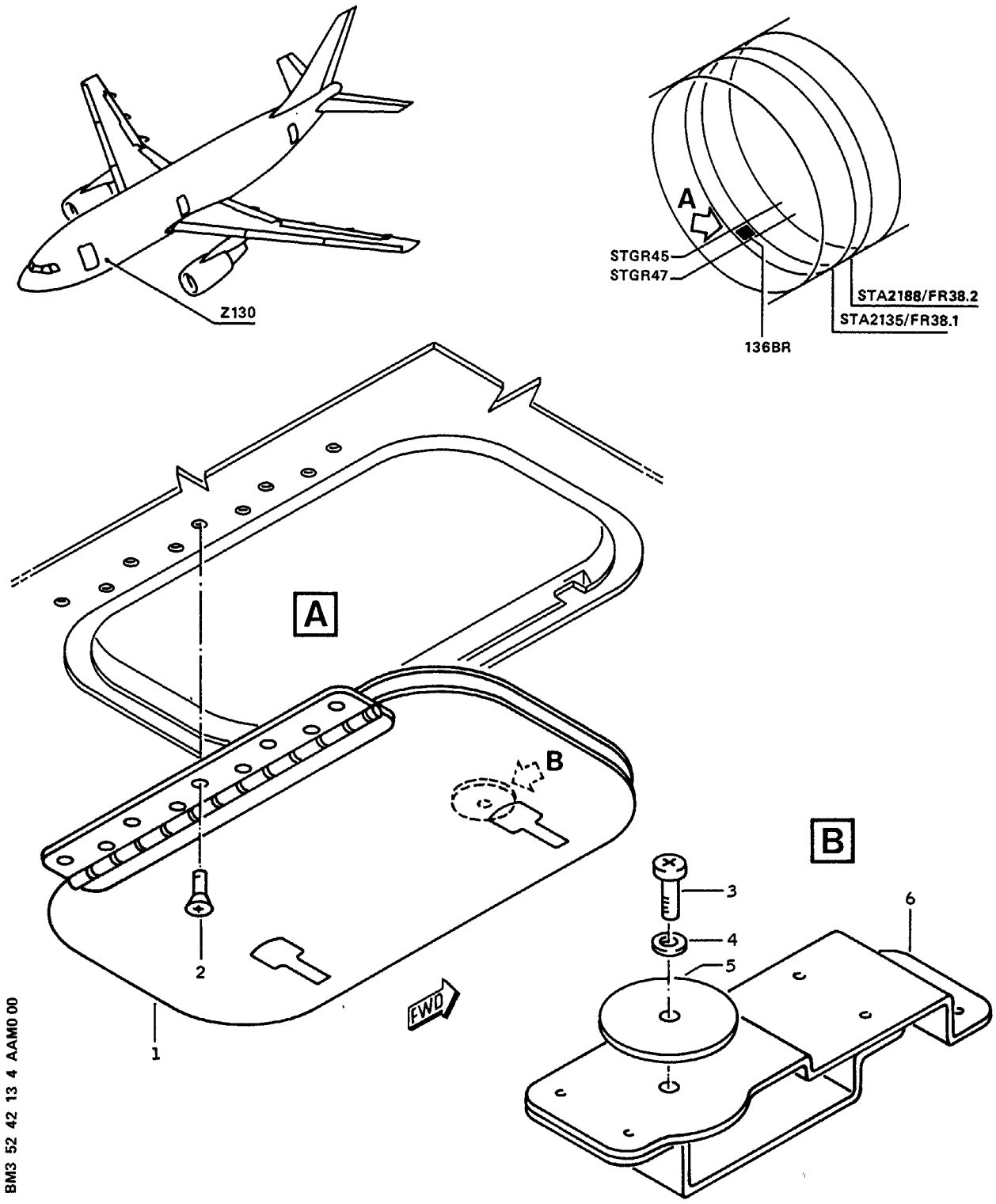
A. Job Set-Up
(1)Position access platform.
(2)Open potable water service door 136BR (1).

B. Removal
(1)Support door (1) and remove screws (2).
(2)Remove screw (3), washer (4) and sealing rubber (5) from bracket (6).

C. Preparation for Installation
(1)Renew damaged sealing rubber (5).
(2)Clean piano hinge of access door and installation area using solvent (Material No. 11-004). For removal of corrosion refer to 51-74-10, P. Block 801.
(3)Apply primer (Material No. 16-001) two times to installation area of piano hinge. For repair of paint coatings refer 51-75-10, P. Block 801.

D. Installation
(1)Place sealing rubber (5) on bracket (6), install washer (4) and screw (3) and tighten.
(2)Position door 136BR (1) at potable water service panel.
(3)Apply sealant (Material No. 09-005) to screws (2).
(4)Insert screws (2) and tighten.
(5)Apply a sealing bead 4 mm (0.1575 in.) (Material No. 09-013) around the installed piano hinge.

E. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Close potable water service door 136BR (1).
(3)Remove access platform.



Potable Water Service Door 136BR
Figure 401

FWD AND AFT CARGO COMPARTMENT DOOR CONTROL DOORS 122CR (152KR) REMOVAL/INSTALLATION

1. Reason for the Job
Removal/installation of the FWD and/or AFT Cargo Compartment door control panel door.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.7 m (9 ft.)
B. Material No. 05-005	Special Materials (Ref. 20-31-00)

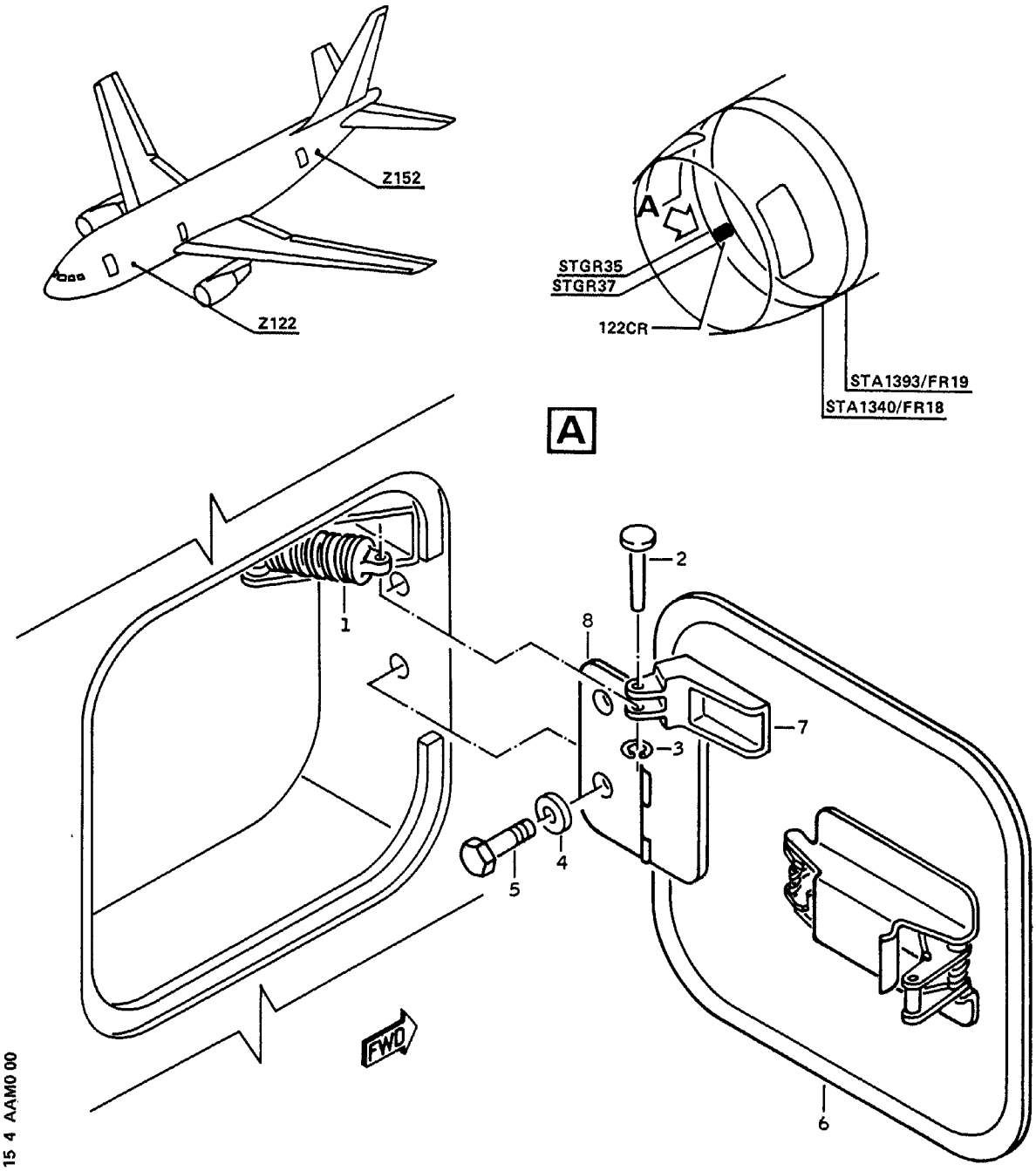
3. Procedure

(Ref. Fig. 401)
(Ref. Fig. 402)

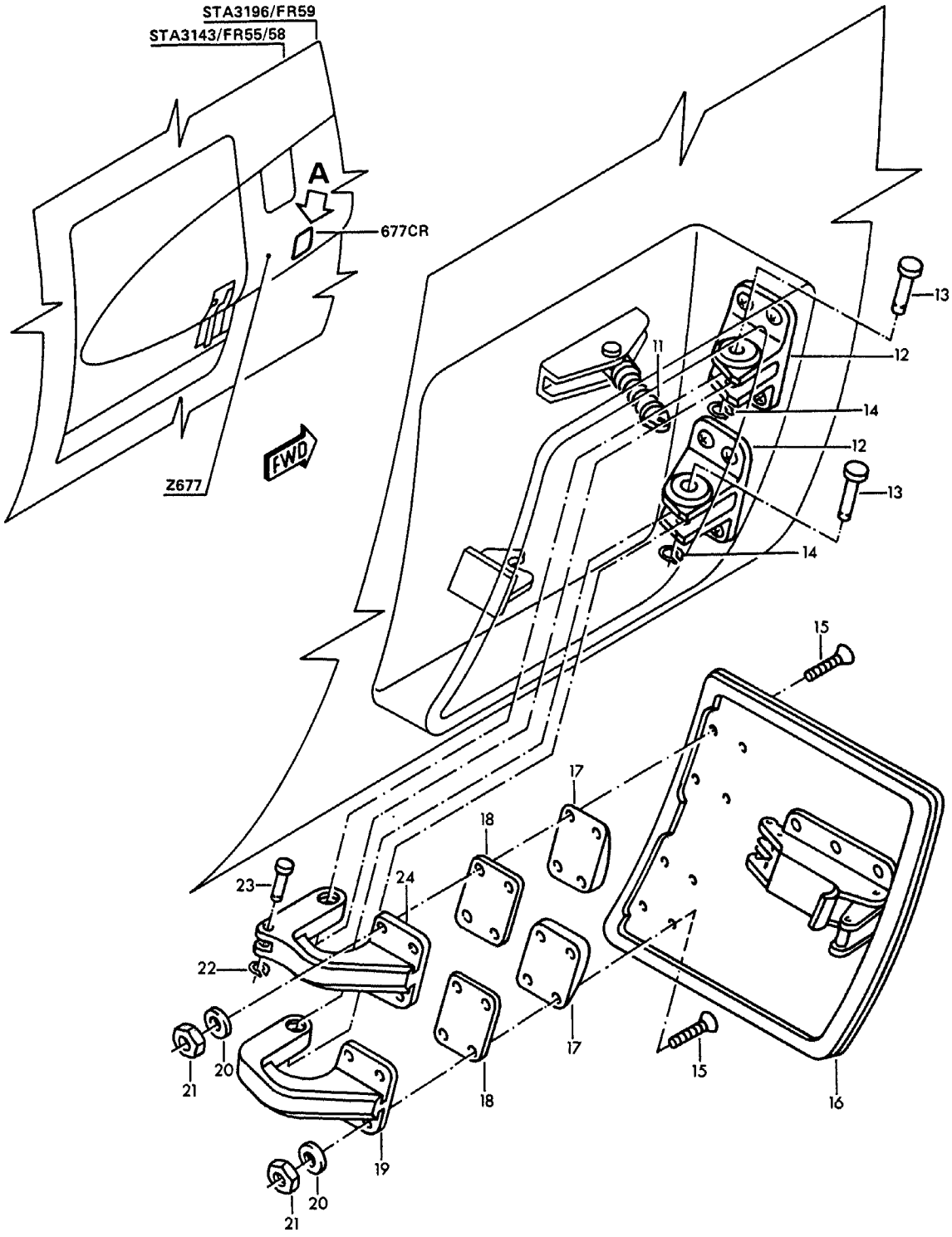
A. Job Set-Up
(1)Position access platform.
(2)Open cargo compartment door control panel door.

B. Removal
(1)FWD Cargo Compartment door control panel door 122CR.
(a)Remove retaining ring (3), pin (2) and spring rod assy (1) from door fitting (7).
(b)Support door 122CR (6) and remove bolts (5) and washers (4) from door hinge (8).
(c)Remove door (6).
(2)AFT Cargo Compartment door control panel door 152KR
(a)Remove retaining ring (22) and pin (23) from hinge assembly (24) and spring rod assy (11). Disconnect spring rod assy (11) from hinge assembly (24).
(b)Remove retaining rings (14) and pins (13) from support fitting assemblies (12) and hinge assemblies (19),(24).
(c)Remove door 152KR (16) from support fitting assemblies (12).
(d)Remove nuts (21), washers (20) and countersunk screws (15).
(e)Remove hinge assemblies (19),(24) and shims (17),(18) from door 152KR (16).

C. Installation
(1)FWD Cargo Compartment door control panel door 122CR (Ref. Fig. 401)
(a)Position door 122CR (6) and insert bolts (5) and washers (4). Tighten bolts.
(b)Install spring rod assy (1) into door fitting (7) and secure with pin (2) and retaining ring (3).
(2)AFT Cargo Compartment door control panel door 152KR (Ref. Fig. 402)
NOTE : Prior to installation, coat shims (17),(18) with corrosion preventive lacquer (Material No. 05-005).
(a)Position door 152KR (16) and install countersunk screws (15), shims (17),(18), hinge assemblies (19),(24), washers (20) and



FWD Cargo Compartment Door Control Panel Door 122CR
Figure 401



BM3 52 42 15 4 ACM0 00

AFT Cargo Compartment Door Control Panel Door 152KR
Figure 402

self-locking nuts (21).

(b)Install hinge assemblies (19),(24) into support fitting assemblies (12) and secure with pins (13) and retaining rings (14).

(c)Install spring rod assy (11) into hinge assembly (24) and secure with pin (23) and retaining ring (22).

D. Close-Up

(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(2)Close cargo compartment door control panel door.

(3)Remove access platform.

REFUEL/DEFUEL PANEL DOOR (144DR) - REMOVAL/INSTALLATION

WARNING : MAKE CERTAIN THAT LANDING GEAR - GROUND SAFETIES AND CHOCKS ARE IN POSITION.
OBSERVE THE SAFETY PRECAUTIONS IN 28-00-00, P. BLOCK 301.

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 1.5 m (4.92 ft.)
B.	Circuit Breaker Safety Clips
C. Material No. 09-018	Sealants (Ref. 20-31-00)
Referenced Procedures	
- 20-28-11, P. Block 1	Electrical Bonding
- 24-41-00, P. Block 301	AC External Power Control
- 28-00-00, P. Block 301	Fuel - General

2. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breaker :

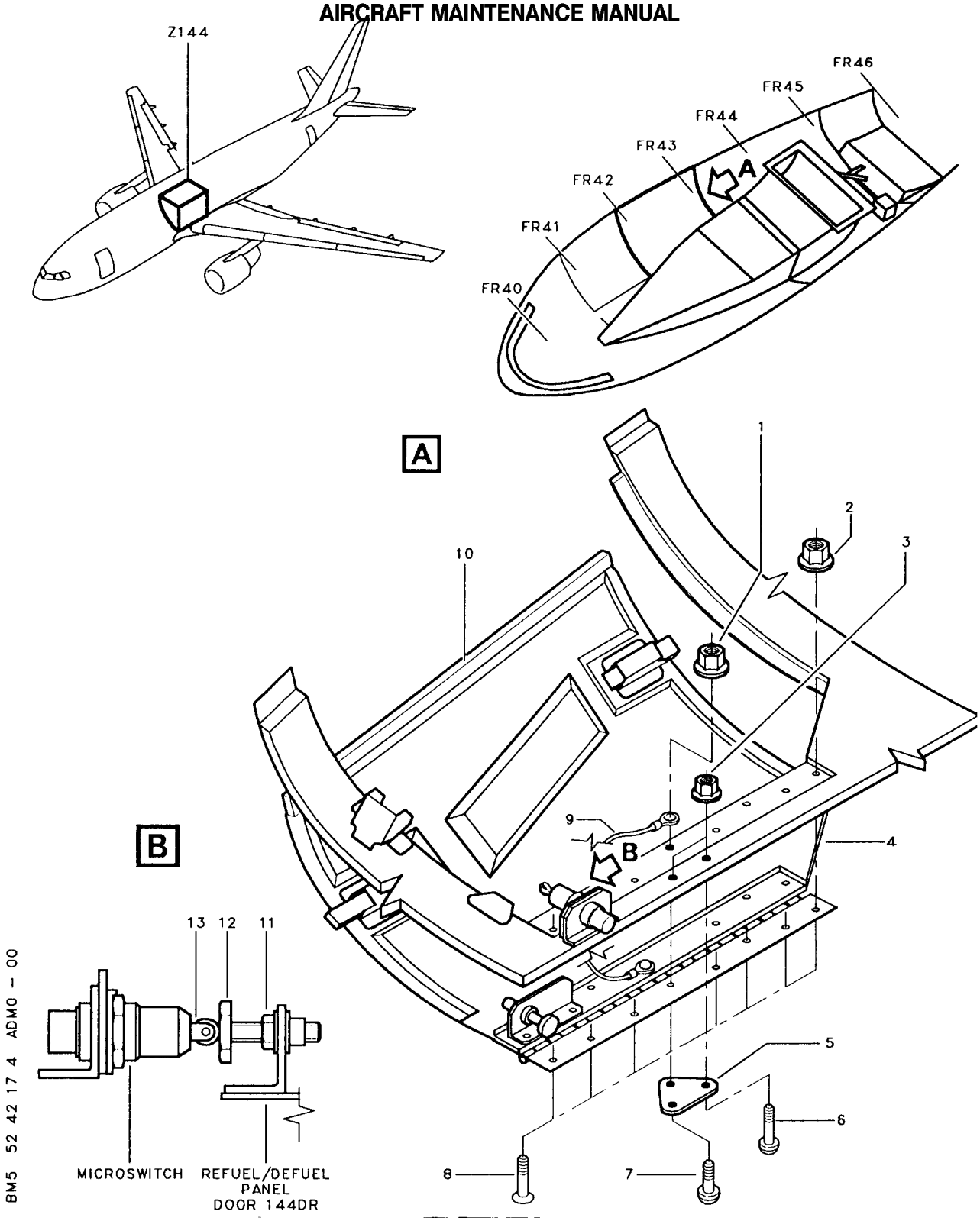
PANEL	SERVICE	IDENT.	LOCATION
132VU	FUEL/FUELLING/CTL &/REFUEL/VALVE	1QU	321/P56

(2)Position access platform
(3)Open refuel/defuel panel door 144DR.

B. Removal
(Ref. Fig. 401)
(1)Support the door (4).
(2)Remove the screw (7) and the nut (1).
(3)Release the bonding strap (9).
(4)Remove the screws (6) and the nuts (3).
(5)Remove the gusset (5).
(6)Remove the screws (8) and the nuts (2).
(7)Remove the door (4).

C. Preparation for Installation.
(1)Make sure that there is no damage on she seal (10).

D. Installation
(1)Apply a Material No. 09-018 on the hinge fitting door and put the door (4) in position in its frame on the hinge side.
(2)Install the screws (8) and the nuts (2).
(3)Tighten the screws (8).
(4)Install the gusset (5).
(5)Install the screws (6) and the nuts (3). Tighten the nuts (6).
(6)Install the bonding strap (9).



Refuel/Defuel Panel Door - Removal/Installation
Figure 401

(7)Install the screw (7) and the nut (1). For electrical bonding, refer to 20-28-11, P. Block 1.
(8)Tighten the nut (1).
(9)Make certain that the door (4) operates correctly.

E. Test
(1)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Adjustment of the proximity switch (13) :
(a)Loosen the nut (11).
(b)Adjust the screw (12) so that the lighting of the refuel/defuel panel is cut off before the door (4) is closed.
(c)Start closing door (4) and when nearly fully closed, check visually that the panel is not lighted.
(d)Open the door (4).
(e)Tighten the nut (11).
(f)Close the door (4).

F. Close-Up
(1)Make certain that working area is clean and clean of tools and miscellaneous items of equipment.
(2)Remove the safety clip and the tag and close circuit breaker 1QU.
(3)Remove the access platform.

DOOR - REFUEL/DEFUEL PANEL 110VU - DEACTIVATION/REACTIVATION

Ref. : CDL 6.03.28.2
CAUTION : THIS PROCEDURE IS TO BE USED ACCORDING TO THE REQUIREMENTS OF THE CDL.
WARNING : LANDING GEAR - MAKE SURE THAT THE GROUND SAFETIES AND CHOCKS ARE IN POSITION.
FLIGHT CONTROLS - MAKE SURE THAT THE GROUND SAFETIES AND NOTICES ARE IN POSITION.

1. Deactivation

A. Reason for the Job
Refer to the CDL item 28.2, Refuel/Defuel Panel Door.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 1.5 m (5 ft)
(2)	Circuit Breaker Safety Clip
(3)	Blanking Caps
(4)Material No. 08-061	Bonding and Adhesive Compounds (Ref. 20-31-00)
(5)Material No. 11-016	Cleaning Agents (Ref. 20-31-00)
Referenced Procedures	
- 12-11-28, P. Block 301	Fuel
- 52-42-17, P. Block 401	Door - Refuel/Defuel Panel 110VU

C. Job Set-Up
(1)Open, safety and tag the following circuit breaker :

PANEL	SERVICE	IDENT.	LOCATION
132VU	FUEL/FUELLING/CTL&/REFUEL/VALVE	1QU	321/P56

(2)Position the access platform below the access door 144DR of the refuel/defuel panel 110VU.
(3)Do a check of the fuel quantity required for the next flight.
(4)If necessary, refuel the aircraft as required (Ref. 12-11-28, P. Block 301).

D. Procedure
NOTE : Before you start the deactivation, make sure that the aircraft is refueled for the next flight.
(1)Remove the rest of the access door 144DR (Ref. 52-42-17, P. Block 401).
(2)Disconnect the electrical connector from the microswitch.
(3)Put blanking caps on the disconnected electrical connectors.
(4)Make sure that the work area is clean and clear of tool(s) and other items.
WARNING : OBEY THE MANUFACTURER'S INSTRUCTIONS WHEN YOU USE SOLVENTS, CLEANING AGENTS OR SEALANTS.

USE PROTECTIVE CLOTHING, RUBBER GLOVES, GOGGLES AND A MASK.

(5)Clean the aircraft structure around the cutout of the door with Cleaning Agent (Material No. 11-016).

(6)Cover the cutout of the door with three layers of Adhesive Compound (Material No. 08-061).

NOTE : Attach the first layer longitudinally over the cutout, the second and the third layers diagonally so that the layers overlap each other.

E. Close-Up

(1)Remove the safety clip and the tag and close the circuit breaker 1QU.

(2)Remove the access platform.

(3)Make an entry in the aircraft technical log that the access door of the refuel/defuel panel is removed and temporarily closed with high-speed tape.

2. Reactivation

A. Reason for the Job

Refer to the CDL item 28.2, Refuel/Defuel Panel Door.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform 1.5 m (5 ft)
(2)	Circuit Breaker Safety Clip
(3)	Blanking Caps
(4)Material No. 08-061	Bonding and Adhesive Compounds (Ref. 20-31-00)
(5)Material No. 11-016	Cleaning Agents (Ref. 20-31-00)
Referenced Procedure - 52-42-17, P. Block 401	Door - Refuel/Defuel Panel 110VU

C. Job Set-Up

(1)Open, safety and tag the following circuit breaker :

PANEL	SERVICE	IDENT.	location
132VU	FUEL/FUELLING/CTL&/REFUEL/VALVE	1QU	321/P56

(2)Position the access platform below the access door 144DR of the refuel/defuel panel 110VU.

D. Procedure

(1)Remove the high-speed tape from the cutout of the door.

(2)Clean the aircraft structure with Cleaning Agent (Material No. 11-016).

(3)Remove the blanking caps from the electrical connectors.

(4)Connect the electrical connector to the microswitch.

(5)Install a new door (Ref. 52-42-17, P. Block 401).

E. Close-Up

(1)Remove the safety clip and the tag and close the circuit breaker 1QU.
(2)Make sure that the work area is clean and clear of tool(s) and other items.
(3)Close the access door 144DR.
(4)Remove the access platform.
(5)Clear technical log.

FWD AND AFT CARGO LOADING SYSTEM (CLS) CONTROL PANEL ACCESS DOORS - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal of FWD CLS Control Panel Access Door 122DR

B. Removal of AFT CLS Control Panel Access Door 677DR

2. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.7 m (9 ft.)
(2)	Retaining Ring
(3)Material No. 05-002	Special Materials (Ref. 20-31-00)
(4)Material No. 09-013	Sealants (Ref. 20-31-00)

A. Procedure

R **ON A/C 001-005, 105-105,

(Ref. Fig. 401)

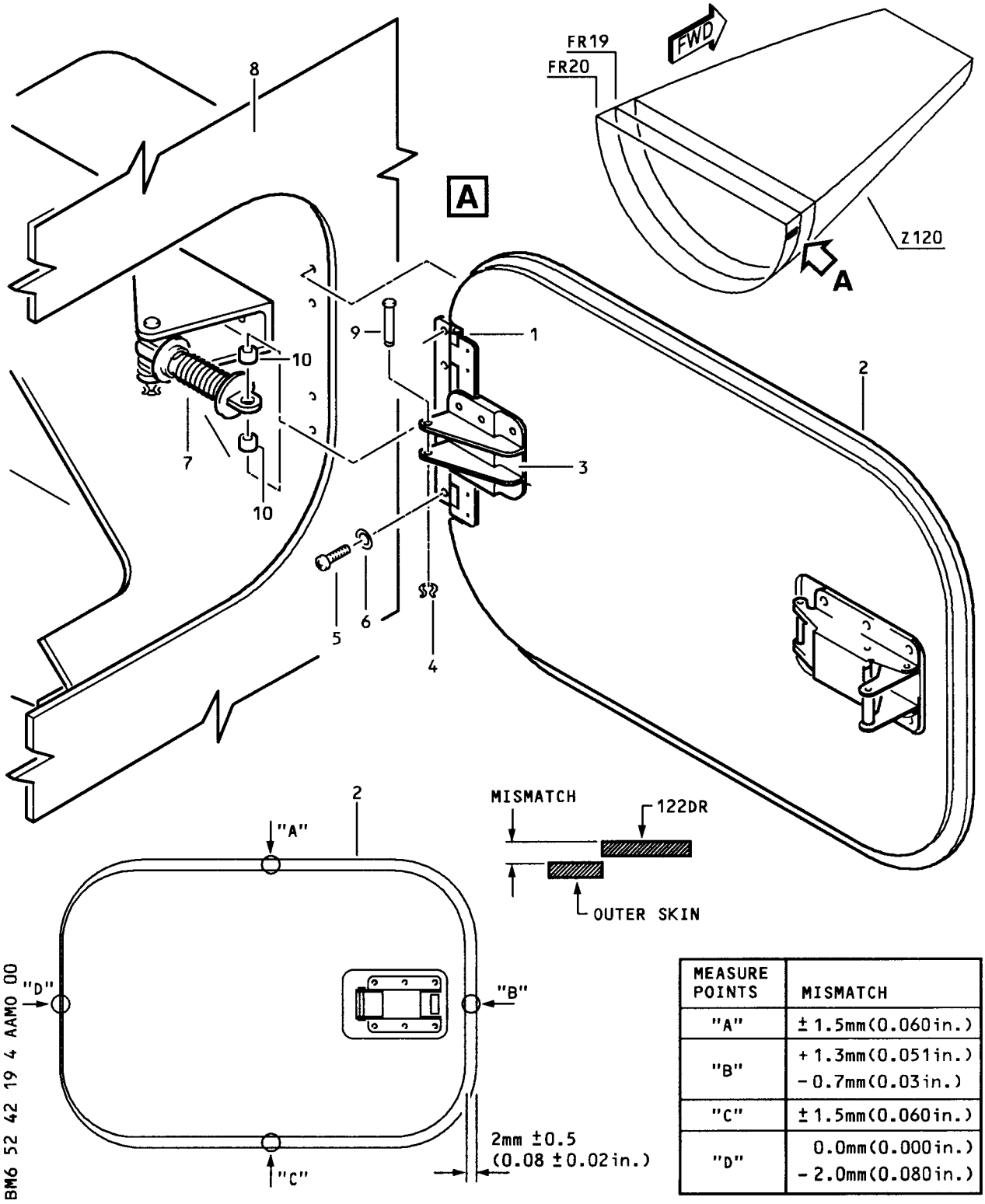
**ON A/C ALL

R Post SB 52-2043 For A/C 001-005,105-105,

(Ref. Fig. 402)

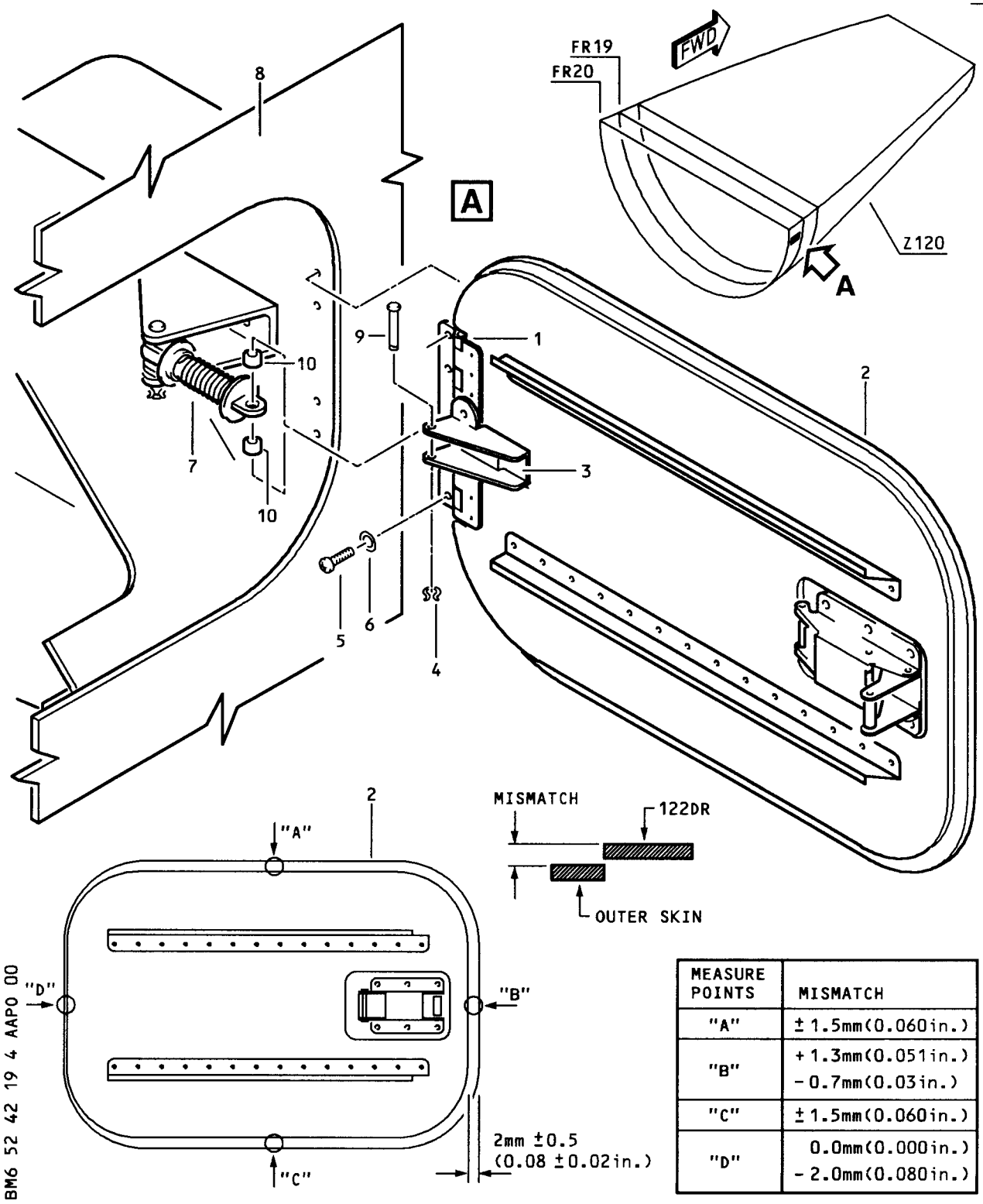
**ON A/C ALL

(1)Job Set-up
(a)Position access platform below access door 122DR.
(2)Removal
(a)Open access door (2).
(b)Remove and discard retaining ring (4).
(c)Remove clevis pin (9) from spring rod assembly (7) and door fitting (3).
(d)Remove bushes (10).
(e)Remove screws (5) and washers (6) from hinge (1).
(f)Remove access door (2).
(3)Preparation for Installation
(a)Clean component interface and/or adjacent area.
(b)Do a visual inspection of component interface and/or adjacent area.
(c)Apply anti-corrosion compound (Material No. 05-002) to the threads of the screws (5).
(d)Apply sealant (Material No. 09-013) to mating surfaces of the hinge (1).



MEASURE POINTS	MISMATCH
"A"	± 1.5mm(0.060in.)
"B"	+ 1.3mm(0.051in.) - 0.7mm(0.03in.)
"C"	± 1.5mm(0.060in.)
"D"	0.0mm(0.000in.) - 2.0mm(0.080in.)

FWD CLS Control Panel Access Door 122DR
Figure 401



MEASURE POINTS	MISMATCH
"A"	± 1.5mm(0.060in.)
"B"	+ 1.3mm(0.051in.) - 0.7mm(0.03in.)
"C"	± 1.5mm(0.060in.)
"D"	0.0mm(0.000in.) - 2.0mm(0.080in.)

FWD CLS Control Panel Access Door 122DR
Figure 402

R **ON A/C 001-005, 105-105,

(4)Installation
(a)Position access door (2) and align holes in hinge (1) with holes in structure (8).
(b)Install screws (5) together with washers (6). Do not tighten screws at this time.
(c)Align eye-end of spring rod assembly (7) with holes of door fitting (3).
(d)Install bushes (10).
(e)Install clevis pin (9) in door fitting (3) and spring rod assembly (7).
(f)Safety clevis pin (9) with retaining ring (4).
(5)Adjustment
(a)Make certain that gap around the access door (2) is between 1.5 and 2.5 mm (0.06 and 0.1 in.).
(b)For mismatch measurements adjust the door in accordance with the table (Ref. Fig. 401).
(c)After check of adjustment tighten the screws (5).
(6)Test
(a)Open and close the appropriate access door to make sure that it operates correctly.
(7)Close-Up
(a)Make certain that work area is clean and clear of tools and other items.
(b)Make certain that the access door 122DR is closed.
(c)Remove access platform.

**ON A/C ALL

R Post SB 52-2043 For A/C 001-005,105-105,

(4)Installation
(a)Position access door (2) and align holes in hinge (1) with holes in structure (8).
(b)Install screws (5) together with washers (6). Do not tighten screws at this time.
(c)Align eye-end of spring rod assembly (7) with holes of door fitting (3).
(d)Install bushes (10).
(e)Install clevis pin (9) in door fitting (3) and spring rod assembly (7).
(f)Safety clevis pin (9) with retaining ring (4).
(5)Adjustment
(a)Make certain that gap around the access door (2) is between 1.5 and 2.5 mm (0.06 and 0.1 in.).
(b)For mismatch measurements adjust the door in accordance with the table (Ref. Fig. 402).
(c)After check of adjustment tighten the screws (5).
(6)Test
(a)Open and close the appropriate access door to make sure that it

operates correctly.
(7)Close-Up
(a)Make certain that work area is clean and clear of tools and other items.
(b)Make certain that the access door 122DR is closed.
(c)Remove access platform.

**ON A/C ALL

3. AFT CLS Control Panel Access Door 677DR

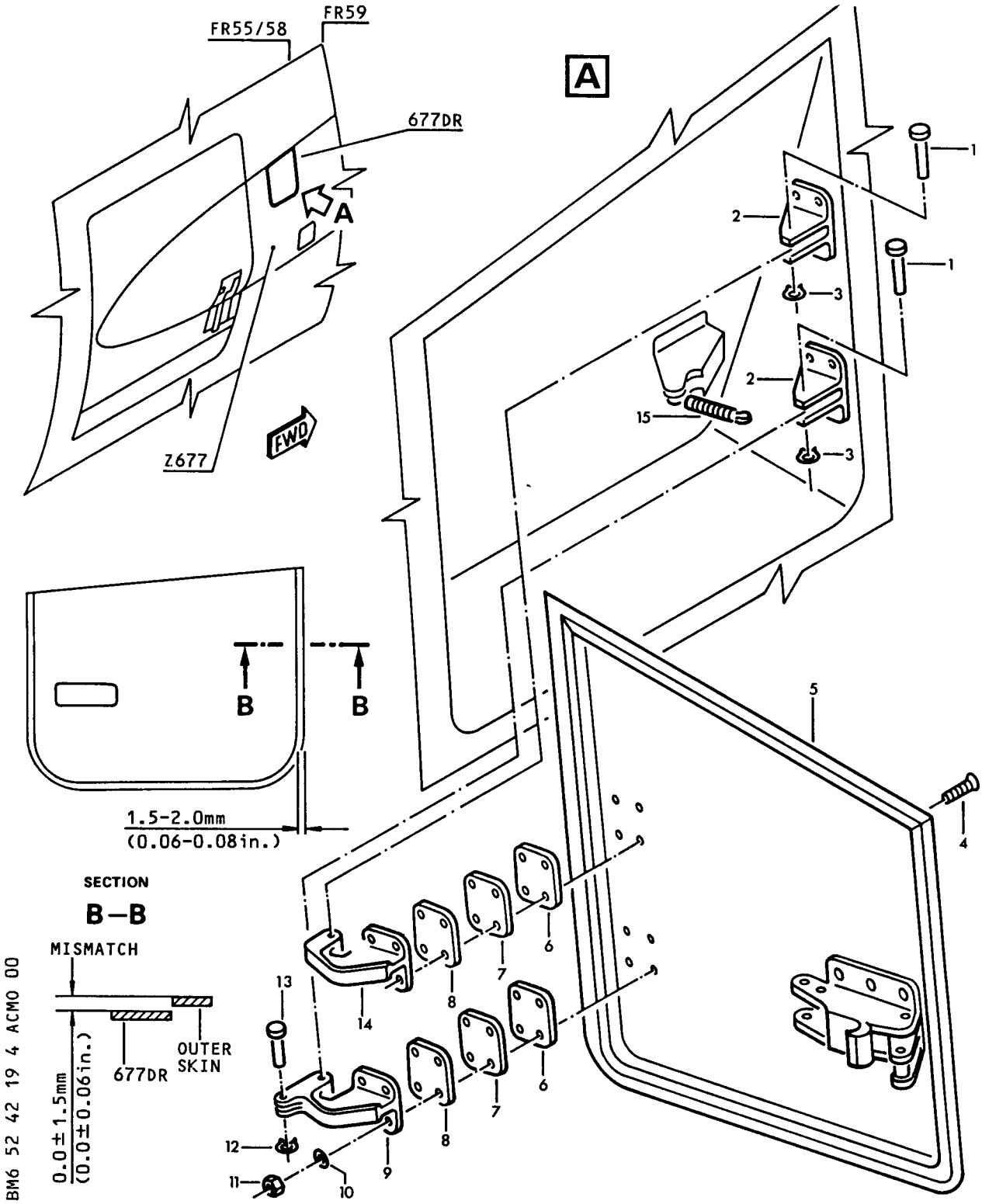
A. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.7 m (9 ft.)
(2)	Retaining Ring
(3)Material No. 05-002	Special Materials (Ref. 20-31-00)
(4)Material No. 05-005	Special Materials (Ref. 20-31-00)
(5)Material No. 09-013	Sealants (Ref. 20-31-00)

B. Procedure
(Ref. Fig. 403)
(1)Job Set-up
(a)Position access platform below access door 677DR.
(2)Removal
(a)Open access door (5).
(b)Remove retaining ring (12) and pin (13) from hinge assembly (9) and spring rod assy (15). Disconnect spring rod assy (15) from hinge assembly (9).
(c)Remove retaining rings (3) and pins (1) from support fitting assemblies (2) and hinge assemblies (9),(14).
(d)Remove door (5) from support fitting assemblies (2).
(e)Remove nuts (11), washers (10) and countersunk screws (4).
(f)Remove hinge assemblies (9),(14) and shims (6),(7),(8) from door (5).
(3)Preparation for Installation
(a)Clean component interface and/or adjacent area.
(b)Visually inspect component interface and/or adjacent area.
(c)Apply anti-corrosion compound (Material No. 05-002) to threads of screws (4).
(d)Apply sealant (Material No. 09-013) to mating surfaces of the hinge (9),(14).
(4)Installation

NOTE : Prior to installation, coat shims (6),(7),(8) with corrosion preventive (Material No. 05-005).

(a)Position door (5) and install countersunk screws (4), shims (6),(7),(8) hinge assemblies (9),(14), washers (10) and self-locking nuts (11).



AFT CLS Control Panel Access Door 677DR
Figure 403

(b)Install hinge assemblies (9),(14) into support fitting assemblies (2) and secure with pins (1) and new retaining rings (3).
(c)Install spring rod assy (15) into hinge assembly (9) and secure with pin (13) and new retaining ring (12).

(5)Adjustment
(a)Make certain that gap around access door (5) is between 1.5 and 2.0 mm (0.06 and 0.08 in.).
(b)Adjust the mismatch to 0.0 ±1.5 mm (0.0 ±0.059 in.) by adjustment of the shim thickness.
(c)After check or adjustment, tighten nuts (11).

(6)Test
(a)Open and close access door to make certain that it operates correctly.

(7)Close-Up
(a)Make certain that work area is clean and clear of tools and other items.
(b)Make certain that access door 677DR is closed.
(c)Remove access platform.

FWD CARGO LOADING SYSTEM (CLS) CONTROL PANEL ACCESS DOORS - INSPECTION/CHECK

1. Inspection of the CLS Control Panel Access Door 122DR

A. Reason for the Job

To inspect the FWD CLS control panel access door 122DR for damage.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.7 m (9 ft.)
Referenced Procedure - 52-42-19, P. Block 401	FWD and AFT CLS Control Panel Access Door Non Destructive Testing Manual (51-60-00, Part 6)

C. Procedure

(Ref. Fig. 601)

(1)Job Set-Up

(a)Position access platform below access door 122DR.

(b)Open access door 122DR.

(2)Inspection

(a)Remove access door 122DR (Ref. 52-42-19, P. Block 401).

(b)Do a dye penetrant inspection of hinge (Ref. NTM 51-60-00, Part 6).

(c)Do an inspection of access door 122DR for corrosion, correct attachment of fasteners and other damage.

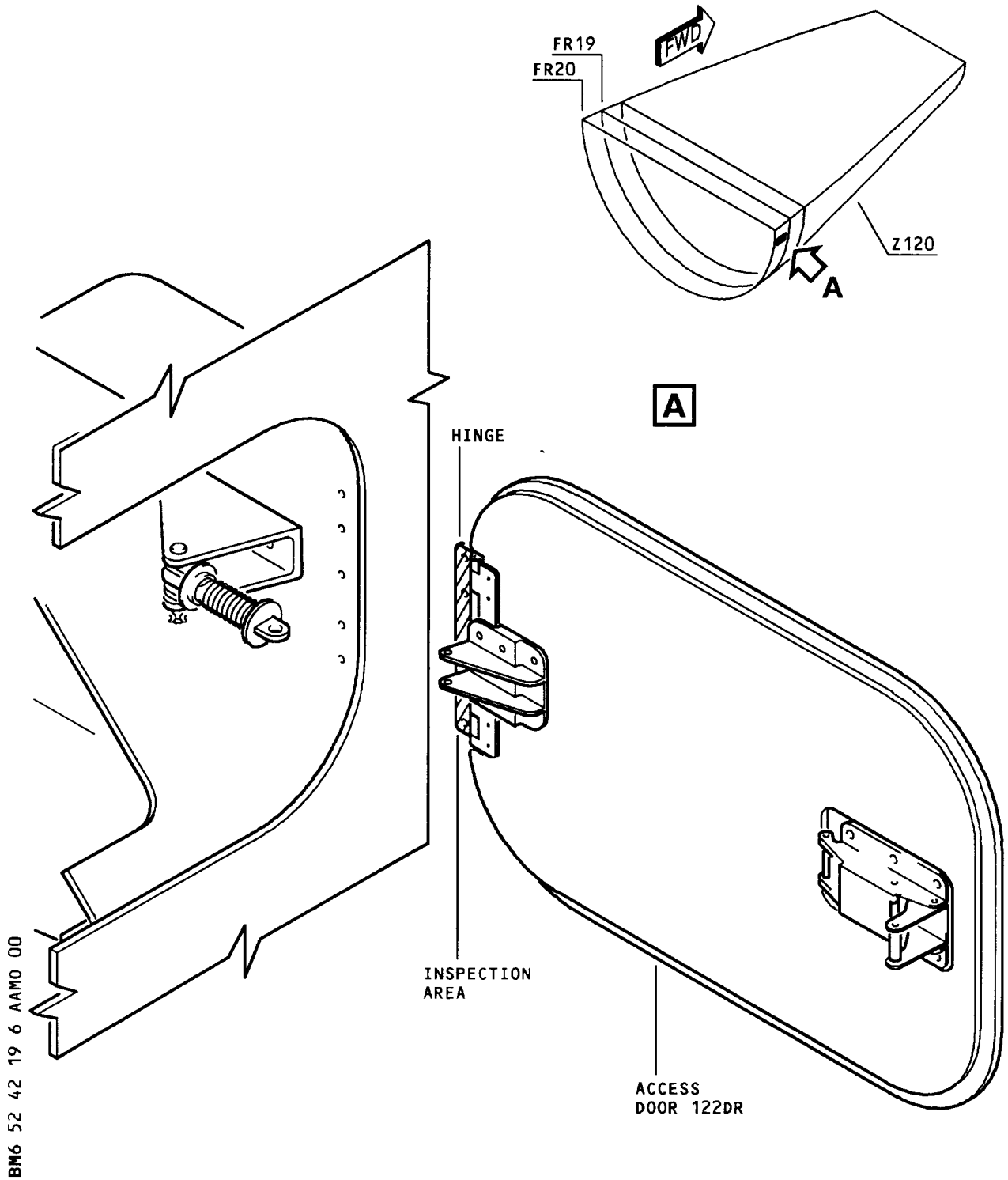
(d)Install access door 122DR. In case of crack findings, install new door (Ref. 52-42-19, P. Block 401).

(3)Close-Up

(a)Make certain that work area is clean and clear of tools and other items.

(b)Make certain that access door 122DR is closed.

(c)Remove access platform.



FWD CLS Control Panel Access Door 122DR
Figure 601

TOILET SERVICE DOOR - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 3.1 m (10 ft.)
B. Material No. 05-002	Special Materials (Ref. 20-31-00)
C. Material No. 09-003	Sealants (Ref. 20-31-00)

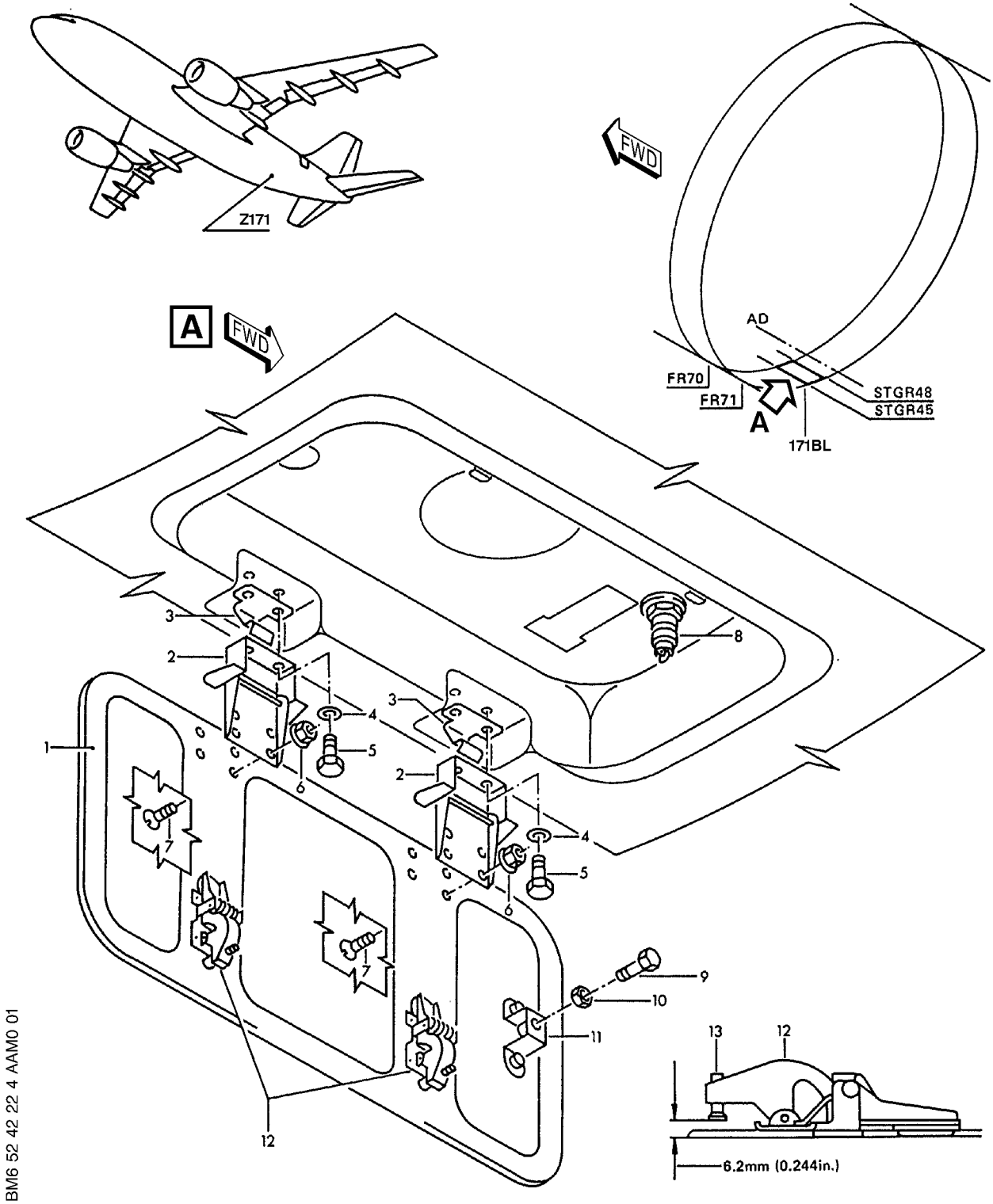
2. Procedure

(Ref. Fig. 401)

A. Job Set-Up
(1)Position access platform.

B. Removal
(1)Release quick-release fasteners (12) and open toilet service door (1).
(2)Remove screws (5) and washers (4) from hinge assemblies (2).
(3)Remove toilet service door (1) with hinge assemblies (2) and flat springs (3).
(4)Remove screws (7) and nuts (6) and separate hinge assemblies (2) from toilet service door (1).
(5)Loosen nut (10) and remove set screw (9) with nut (10) from angle (11).

C. Installation
(1)Adjustment of screws (13).
(a)Lock quick-release fasteners (12).
(b)Adjust screws (13) of quick-release fasteners (12) to come up to a measure of 6.2 mm (0.244 in.).
(c)Unlock quick-release fasteners (12).
(2)Apply sealant (Material No. 09-003) to contact areas of hinge assemblies (2).
(3)Position hinge assemblies (2) to door (1).
(4)Install screws (7) using anti-corrosion compound (Material No. 05-002) and secure with nuts (6).
(5)Apply sealant (Material No. 09-003) to contact areas of flat springs (3).
(6)Position flat springs (3) and door (1) to fuselage structure.
(7)Install screws (5) and washers (4) using anti-corrosion compound (Material No. 05-002) and fasten.
(8)Install set screw (9) and nut (10) to angle (11) using anti-corrosion compound (Material No. 05-002).
(9)Adjustment of limit switch 14MG (8).
(a)Adjust contact point of limit switch by turning set screw (9).
(b)After contact point has been achieved, turn set screw (9) out of angle (11) by 4.0 mm (0.158 in.).
(c)Secure set screw (9) with nut (10).
(10)Close toilet service door (1) and secure with quick-release fasteners (12).



Toilet Service Door 171BL
Figure 401

R

D. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Remove access platform.

FIXED INTERIOR DOORS - DESCRIPTION AND OPERATION

1. General

These doors are provided for access to the installation position of systems and equipment to be maintained.
Use and location of the doors is indicated by their designation and zone.
Information concerning doors in the passenger compartment is contained in Chapter 52-51-00, for doors in the lower fuselage Chapter 52-52-00 and for fuselage tail section interior doors in Chapter 52-53-00.

FIXED INTERIOR DOORS IN PASSENGER COMPARTMENT
DESCRIPTION AND OPERATION

1. General

**ON A/C ALL

A. The fixed interior door of the passenger compartment (referred to as cockpit door) is installed between FR11 and FR12A to divide the cockpit from the entrance area of the cabin.
The cockpit door is equipped with a Cockpit Door Lock System (CDLS) to control its electrical opening and to prevent an unwanted access to the cockpit.
Furthermore there is a door escape hatch in the cockpit door with a pneumatic operated kinematic. This opens the hatch if a rapid decompression between the cockpit and the cabin occurs.

**ON A/C ALL

2. Component Location

**ON A/C ALL

R

(Ref. Fig. 001)

**ON A/C ALL

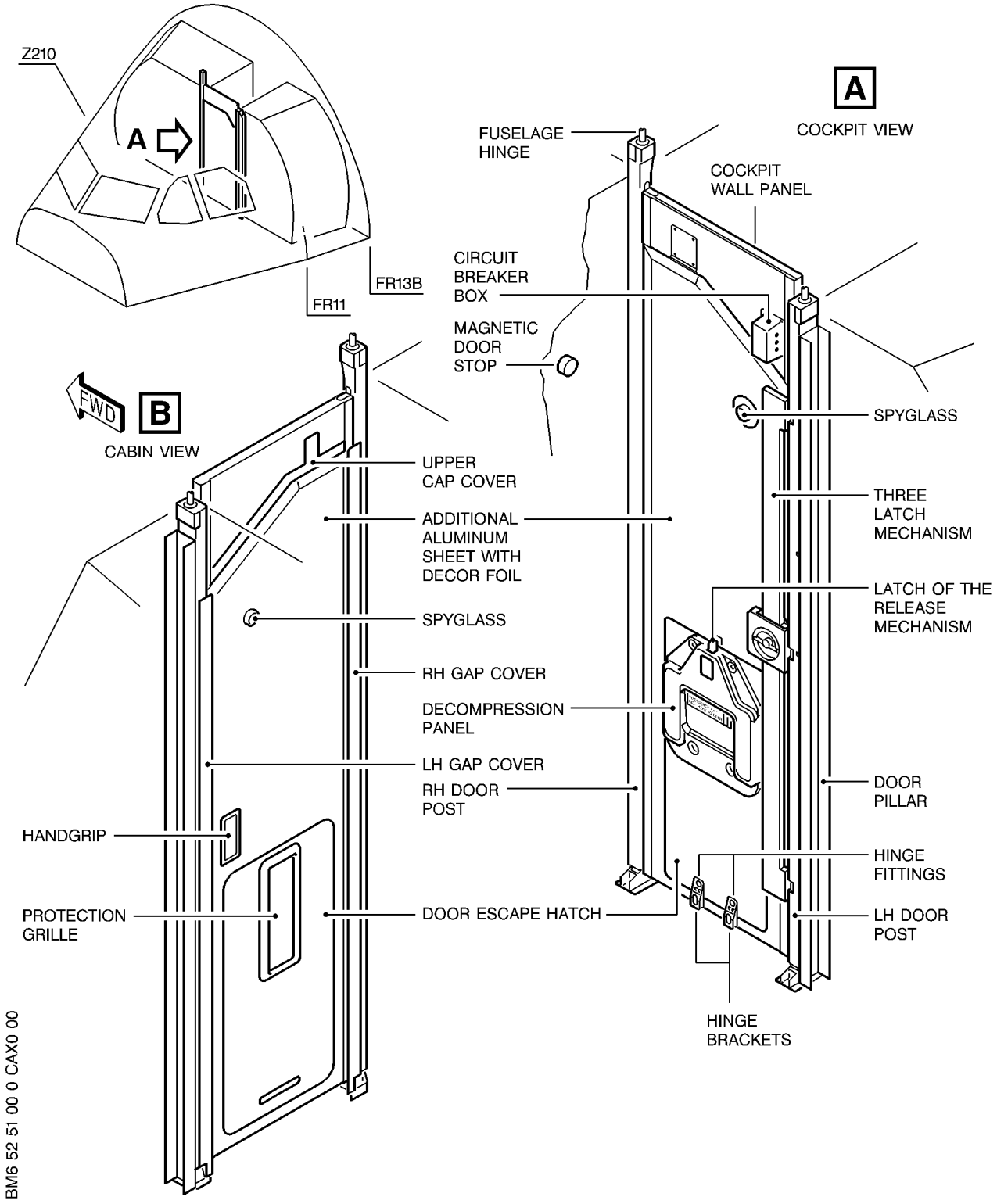
R

(Ref. Fig. 002)

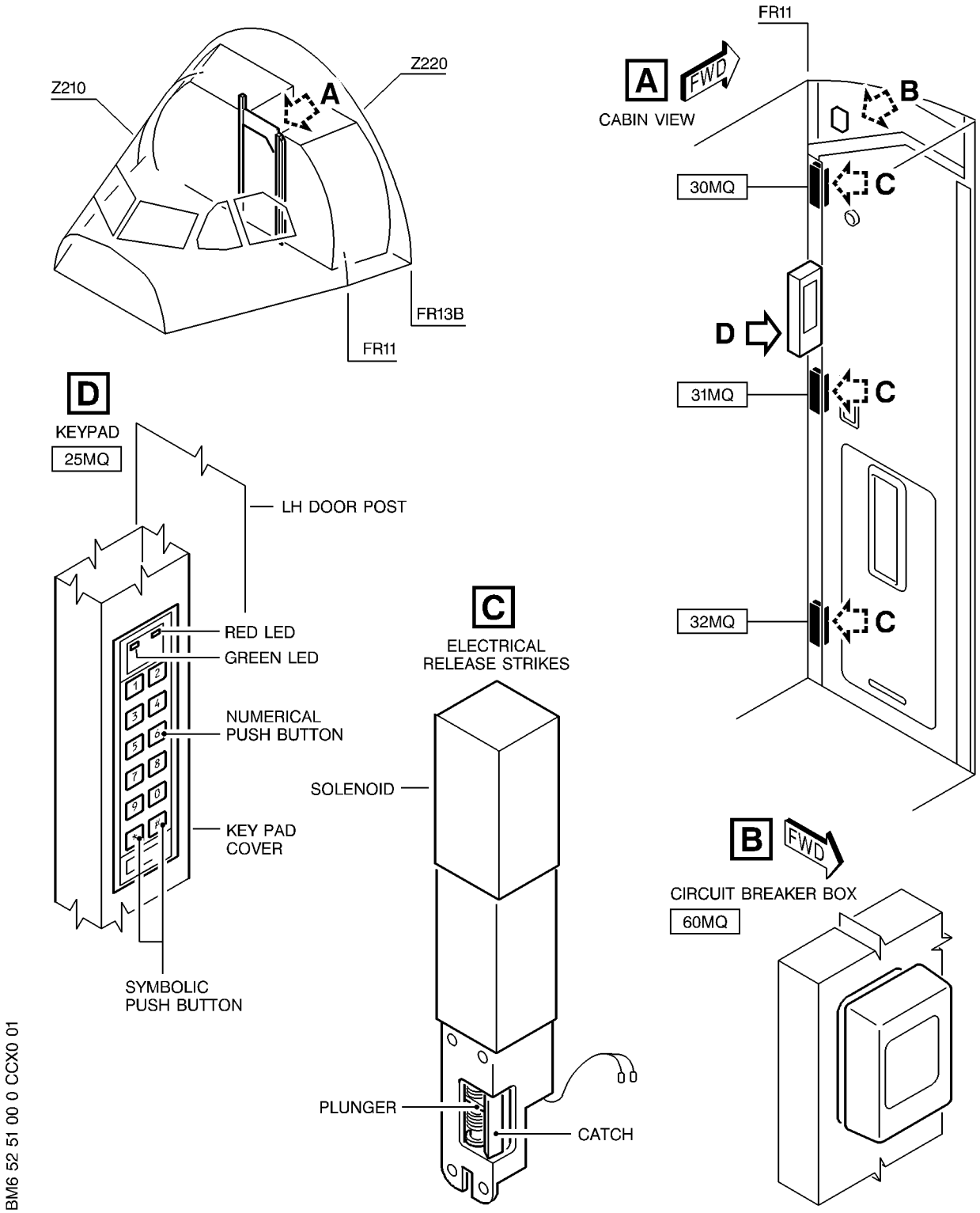
**ON A/C ALL

(Ref. Fig. 003)

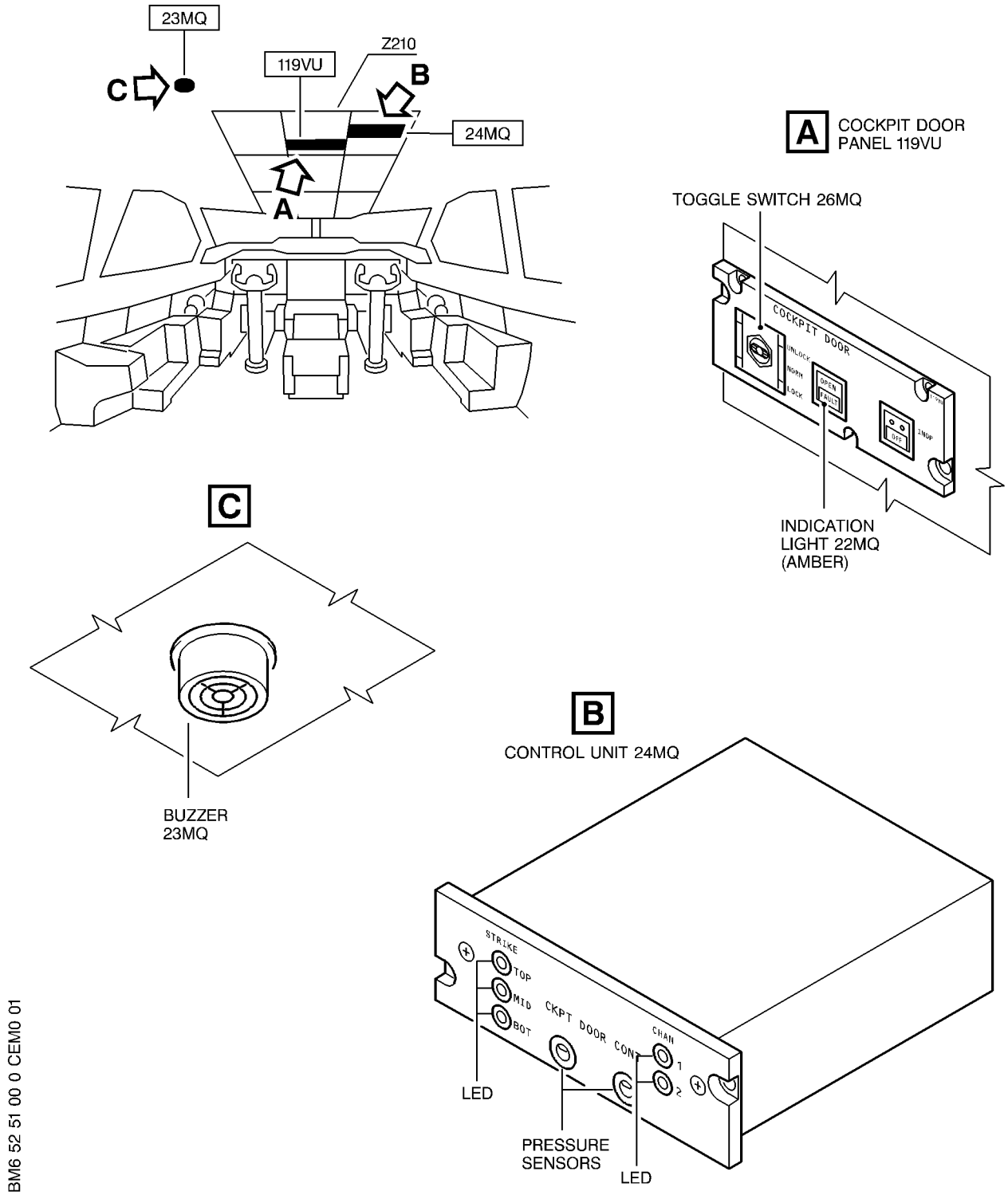
**ON A/C ALL



Compartment Location - Cockpit Door
Figure 001



Component Location - Cockpit Door Lock System (CDLS)
around the Cockpit Door
Figure 002



BM6 52 51 00 0 CEM0 01

Component Location - Cockpit Door Lock System (CDLS)
in the Cockpit
Figure 003

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
	1MQ	CIRCUIT BREAKER	132VU	212	831/841	52-51-00
	22MQ	INDICATION LIGHT OPEN/FAULT	119VU	210	831/841	52-51-00
R	23MQ	BUZZER		210	831/841	52-51-13
R	24MQ	CONTROL UNIT	20VU	210	831/841	52-51-14
	25MQ	KEYPAD		221	831/841	52-51-15
	26MQ	TOGGLE SWITCH UNLOCK/NORM/LOCK	119VU	210	831/841	52-51-00
	30MQ	TOP STRIKE RELEASE		221	831/841	52-51-12
	31MQ	MID STRIKE RELEASE		221	831/841	52-51-12
	32MQ	BOT STRIKE RELEASE		221	831/841	52-51-12
	60MQ	CIRCUIT BREAKER BOX		221	831/841	52-51-18

**ON A/C ALL

3. Description

A. Cockpit Door (Ref. Fig. 001)
The cockpit door is installed in the fixed partition between FR11 and FR12A (zone 220). It opens into the flight direction and a magnetic door stop keeps it in its fully open position. The manually operated three latch mechanism keeps the cockpit door in the closed position.
The top, center and bottom latch mechanism engages with the electrical release strikes installed opposite in the LH door post.
In case of an emergency the cockpit crew can leave the cockpit through the door escape hatch. To open the hatch against the flight direction one of the flight crew must kick against the marked area of the de-compression panel. If a rapid decompression in the cabin occurs, the internal release mechanism of the decompression panel operates pneumatically to open the hatch.

**ON A/C ALL

B. Cockpit Door Lock System (CDLS) (Ref. Fig. 002)
The Cockpit door has an electro-mechanically operated release system CDLS for the cockpit security. The cockpit door is in the locked condition when the CDLS is energized with electrical power. This electrical power comes from the normal busbar 101PP through the circuit breaker 1MQ at the circuit breaker panel 132VU.
If the CDLS is not energized with electrical power the cockpit door is

in the unlocked condition.
The operation of the keypad 25MQ installed at the LH door post causes the buzzer 23MQ in the cockpit to operate. This tells the cockpit crew that a person requests access to the cockpit.
The toggle switch 26MQ in the overhead panel 119VU sends a signal to the control unit 24MQ when it is in the UNLOCKED position. The control unit 24MQ in the overhead panel 20VU then produces an output signal. This signal de-energizes the solenoids of the three electrical release strikes so that the cockpit door is in the unlocked condition.
If there is a sufficient loss of cabin pressure in the cockpit, pressure sensors in the control unit 24MQ operate. Then the electrical release strikes de-energize and the cockpit door is unlocked in the case of a rapid decompression.
If a malfunction occurs in the CDLS, the subsequent indication lights come on:

- the amber FAULT indication light 22MQ and the LED's CHAN 1 or CHAN 2 show that the applicable pressure sensor is unserviceable.
  It is a normal system behaviour that these lights may come on when the pressurization test of the fuselage is in progress.
  When the pressure decreases these lights go off and the CDLS is operative again.
- the amber FAULT indication light 22MQ and the LED's TOP, MID or BOT STRIKE show that the applicable electrical release strike is unserviceable.
  If one of the electrical release strikes has a malfunction the related circuit breaker of the circuit breaker box 40MQ opens. This causes the solenoids of the applicable release strike to de-energize to avoid their damages. In this case the CDLS remains serviceable.

**ON A/C ALL

R

4. Component Description

A. Door Components (Ref. Fig. 001)
(1)Door Structure
The structure of the cockpit door is made of a honeycomb core which is bonded between two layers of prepeg sheets and the edges are reinforced with armoured plates and aluminium profiles. Additionally an armour plate with a decor foil having the same decor as the cockpit lining is attached to the inside, to reinforce the structure.
The cockpit door has a cut-out section for the installation of the door escape hatch. A piano hinge is mounted with screws on the inboard edge to attach the cockpit door on the RH door post.
An magnetic stop is installed on the inside of the cockpit door to stop its movement. Furthermore a door handle is integrated on the cabin side of the cockpit door. It also has a spyglass so that the flight crew can see into the cabin.

Due to 'airworthiness' reasons it is not allowed to attach any additional rigid parts or similar attachments to the reinforced cockpit door. The rigid parts and attachments can have a negative impact if the cockpit door opens during a rapid decompression.

(2)Door Escape Hatch

The door escape hatch (referred to as hatch) is made of a honeycomb core which is bonded between two layer of prepeg sheets. Additionally an armour plate, with the same decor as the cabin lining, is installed on the outside to reinforce the hatch.

Furthermore, two hinge blocks are installed on the inside to hold the hatch in position.

The hatch is installed in the cut-out section of the cockpit door. Two hinge block fittings engage with the related hinge blocks of the cockpit door, so that the hatches are secured at the bottom.

The integrated decompression mechanism has a latch mechanism that safeties the hatch in position at the top. A safety cover is installed over the decompression mechanism to prevent accidental operation.

(3)The Three Latch Mechanism

The top, center and bottom latch mechanism are installed on the inner side of the cockpit door. The center latch mechanism has a spring-loaded D-ring assembly which extends or retracts its internal latch tenon.

The adjustable tie-rods connect the three latch mechanisms together so that their internal tenons move at the same time. The extended tenons engage with the catch of the electrical release strikes so that the cockpit door is locked.

B. Components of the Cockpit Door Lock System (CDLS)

**ON A/C ALL

R

(Ref. Fig. 004)

**ON A/C ALL

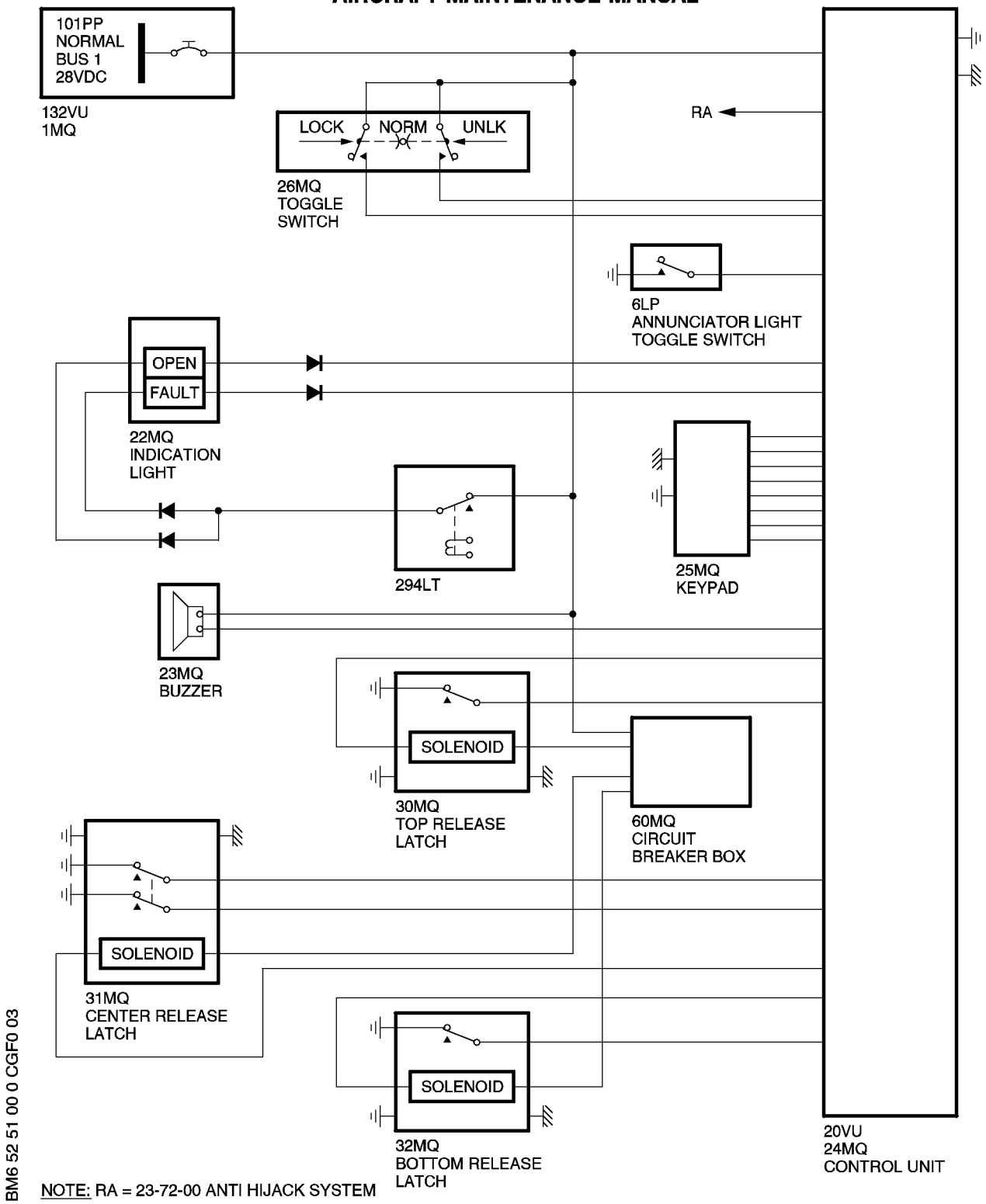
R

(1)Indication Light 22MQ

The indication light 22MQ is installed in the COCKPIT DOOR panel 119VU of the overhead panel 20VU.

The indication light 22MQ is divided in the OPEN legend and the FAULT legend. The OPEN legend comes on in amber when the cockpit door is opened. The FAULT legend also comes on in amber when there is a malfunction in the CDLS.

(2)The keypad 25MQ is an electronic unit installed at the LH door post. There are two LED's (red and green) and twelve pushbutton switches with the legends 0 thru 9, '*' and '#' on the face of the



Schematic of the Cockpit Door Lock System
Figure 004

R

keypad. Furthermore there is an internal buzzer operating briefly to confirm that the electronic unit gets an input via the pushbutton switches.
The logic of the keypad is divided into the "Routine Access" and the "Emergency Access". For the "Routine Access" the '#' pushbutton (or a numbered pushbutton plus the '#' pushbutton) must be entered to announce access to the cockpit. For the "Emergency Access" the operator must enter a four digit code and the '#' pushbutton on the keypad.
The green LED comes on when the flight crew allows an access to the cockpit. The red LED comes on when the flight crew does not allow access to the cockpit.

(3)Buzzer 23 MQ
The electrical buzzer 23MQ is installed in the ceiling panel of the cockpit. A signal from the control unit 24MQ operates the buzzer for min. 2 sec.

(4)Toggle Switch 26MQ
The toggle switch 26MQ installed in the COCKPIT DOOR panel 119VU is a three position switch (UNLOCK, NORM and LOCK). The toggle switch is spring-loaded so that it returns to the NORM position automatically.
The position NORM is the neutral position in which the closed cockpit door is automatically locked. In the UNLOCK position the closed cockpit door is released so that you can push it open. When you select this function it overrides or resets any previous operations.
In the LOCK position the operation of the buzzer 23MQ and the keypad 25MQ is cancelled. The operation can be repeated after a pre-selected time between 5 min. and 15 min.

(5)Top, Center and Bottom Electrical Release Strikes 30MQ, 31MQ and 32MQ.
The three electrical release strikes 30MQ, 31MQ and 32MQ are installed in the LH door post opposite to the door latch mechanisms.
Each electrical release strike has an aluminum housing in which the solenoid, the plunger and the catch are installed.
The solenoids have a pushing coil, a holding coil and one high energy spring:
- the pushing coil pushes the plunger to the extended position
- the holding coil holds the plunger in the extended position
- the spring pulls the plunger to the retracted position, when the holding coil is de-energized.

When the pushing coil and the holding coil are energized, the plunger extends and puts a load on the high energy spring.
At the endstop, the pushing coil is de-energized and the holding coil holds the plunger in the extended position.
When the holding coil is de-energized, the high energy spring retracts so that the plunger moves quickly to the retracted position.
Each electrical release strikes has a microswitch which operates the solenoid when it receives an applicable signal. Then, the plunger extends so that the catch is blocked or it retracts so that the catch is free.
The center electrical release strike (31MQ) has an additional microswitch which monitors the condition of the center latch mechanism. When its tenon does not engage with the catch this causes

the OPEN indication light to come on.

(6)Control Unit 24MQ

The control unit 24MQ is installed in the overhead panel 20VU. This panel has the white legends CKPT DOOR CONT, the STRIKE TOP, MID and BOT and the CHAN 1 and CHAN 2.

The control unit controls the logic (fault indications, time delays and door access control) of the cockpit door lock system. It has two internal pressure sensors which operate if a rapid decompression in the cockpit occurs. This may also occur when the pressurization test of the fuselage is in progress.

The microprocessor of the control unit receives signals from:

- the toggle switch 26MQ
- the keypad 25MQ.

The microprocessor sends a signal to operate:

- the buzzer 23MQ
- the indication light 22MQ
- the green or red LED of the keypad 25MQ
- the solenoids of the three electrical release strikes 30MQ, 31MQ and 32MQ.

(7)Circuit Breaker Box 60MQ

The circuit breaker box 60MQ is installed inside the cockpit on the cockpit wall panel. Inside of the box there are three single equipment circuit breakers to control the power supply of the electrical release strikes separately. The applicable circuit breaker opens and stops the power supply if the related electrical release strike has a malfunction. Each equipment circuit breaker can manually be opened to interrupt the function of the related electrical release strike. For the reset function the opened circuit breaker can be manually pushed in.

**ON A/C ALL

5. Operation

A. Normal Mode

NOTE : If the CDLS is not energized with electrical power the cockpit door is in the unlocked condition. When you then push the cockpit door in the flight direction it opens.

(1)Routine Access into the Cockpit from the Cabin Side

Push the '#' pushbutton or enter a numbered pushbutton plus the '#' pushbutton on the keypad 25MQ. Then the buzzer 23MQ comes on which tells the flight crew that an access into the cockpit is requested. When the flight crew sets the toggle switch 26MQ on the COCKPIT DOOR panel 119VU to the UNLOCK position this causes:

- the control unit 24MQ to de-energize the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ. Then the plungers retract

so that they do not block their catches.
- the control unit 24MQ to send a signal to the keypad 25MQ so that its green LED comes on.

The green LED on the keypad 25MQ shows that the cockpit door is unloced and access into the cockpit is available.
Push the cockpit door into the flight direction until the magnetic stop keeps it in its fully open position. Then the amber OPEN indication light 22MQ on the COCKPIT DOOR panel 119VU comes on to show that the cockpit door is open.

When the flight crew sets the toggle switch 26MQ on the COCKPIT DOOR panel 119VU to the LOCK position this causes:
- the control unit 24MQ to energize the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ so that their plungers remain extended and block their catches.
- the control unit 24MQ to send a signal to the keypad 25MQ so that its red LED comes on.

The red LED on the keypad 25MQ shows that the cockpit door is locked and access into the cockpit is not given.
In this case the operation of the keypad 25MQ and the buzzer 23MQ is cancelled during a defined time (adjustable between 5 min. and 15 min. by the operator).
The flight crew can cancel this function when they set the toggle switch 26 MQ from the LOCK to the UNLOCK position.

(2)Opening of the Cockpit Door from the Cockpit Side
Lift and turn the D-ring of the center latch mechanism through 90 degrees so that its internal, spring-loaded tenon retracts. At the same time, the related tie-rods operate the spring-loaded tenons of the top and bottom latch mechanisms. The tenons retract and disengage from the catches of the electrical release strikes and you can open the cockpit door.

**ON A/C ALL

B. Emergency Mode

(1)Emergency Access into the Cockpit from the Cabin Side.
Enter the numerical emergency entry code plus the '#' pushbutton on the keypad 25MQ. This causes the buzzer 23MQ to come on continuously and the green LED on the keypad 25MQ to flash. Furthermore the OPEN indication light 22MQ on the COCKPIT PANLEL 119VU flashes in amber.
When the flight crew does not operate the toggle switch 26MQ on the COCKPIT DOOR panel 119VU within a defined time (adjustable between 15 sec. and 2 min. by the operator) this causes:
- the control unit 24MQ to de-energize the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ. Then the plungers retract so that they do not block their catches for 5 sec.
- the control unit 24MQ to send a signal to the keypad 25MQ. This

causes the green LED to come on for 5 sec.
- the OPEN indication light 22MQ to come on in amber for 5 sec.

The green LED on the keypad 25MQ shows that the cockpit door is unlocked and an access into the cockpit is possible.
Push the cockpit door into the flight direction until the magnetic stop keeps it in its fully open position. The OPEN indication light 22MQ on the COCKPIT DOOR panel 119VU comes on to show that the cockpit door is open.
When the flight crew sets the toggle switch 26MQ within a defined time (adjustable between 15 sec. and 2 min. by the operator) to the UNLOCKED position this causes:
- the control unit 24MQ to de-energize the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ. This causes their plungers to retract so that they do not block their catches.
- the control unit 24MQ to send a signal to the keypad 25MQ so that its green LED comes on.
- the buzzer 23MQ to go off.

The green LED on the keypad 25MQ shows that the cockpit door is unlocked and an access into the cockpit is possible.
Push the cockpit door into the flight direction until the magnetic stop keeps it in its fully open position. The OPEN indication light 22MQ on the COCKPIT DOOR panel 119VU comes on to show that the cockpit door is open.

When the flight crew sets the toggle switch 26MQ on the COCKPIT DOOR panel 119VU to the LOCK position within a defined time (adjustable between 15 sec. and 2 min. by the operator) this causes:
- the control unit 24MQ to keep the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ energized so that their plungers remain extended and block their catches.
- the control unit 24MQ to send a signal to the keypad 25MQ so that its red LED comes on. This shows that the cockpit door is locked and an access into the cockpit is not given.

In this case the operation of the keypad 25MQ and the buzzer 23MQ is cancelled during a defined time (adjustable between 5 min. and 15 min. by the operator).
The flight crew can cancel this function when they set the toggle switch 26MQ from the LOCK to the UNLOCK position.

(2) Opening of the Cockpit Door from the Cockpit Side
Lift and turn the D-ring of the center latch mechanism through 90 degrees so that its internal, spring-loaded tenon retracts. At the same time, the related tie-rods operate the spring-loaded tenons of the top and bottom latch mechanisms. The tenons retract and disengage from the catches of the electrical release strikes and you can open the cockpit door.

(3) Removal of the Door Escape Hatch in case of an Emergency in the Cockpit
To open the hatch, one of the flight crew must kick against the marked area of the decompression panel.
If a rapid decompression occurs, the internal release mechanism of the decompression panel operates pneumatically.

In each case, the hatch opens against the flight direction.

**ON A/C ALL

FIXED INTERIOR DOORS IN PASSENGER COMPARTMENT - ADJUSTMENT/TEST

**ON A/C ALL

1. Reason for the Job

A. Test of the Cockpit Door Lock System (CDLS)
(1)Operational Test of the CDLS
(2)Operational Test of the Routine Access
(3)Operational Test of the Emergency Access
(4)Functional Test of the Door Opening Force
(5)Operational Check of all Pressure Sensing Channels for Rapid Decompression
(6)Operational Check of Door Opening in Case of Power Off
(7)Operational Check of Door Opening by using the Emergency Code.

2. Equipment and Materials

ITEM	DESIGNATION
R A.	DECOMPRESSION TEST SIMULATOR AR4728-1
B.	Spring Balance 20 daN (48 lbf.)
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

3. Procedure

A. Job Set-Up
(1)Make sure that the cockpit door is closed.
(2)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that the following circuit breaker is closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	DOORS/PAX/MON6	1MQ	321/P85

B. Tests

**ON A/C ALL

(1)Operational Test of the CDLS
(a)Do the lamp test to make sure that the control unit 24MQ is serviceable and the OPEN and FAULT indication light 22MQ operates correctly.

R NOTE : The lamp test has effect on the behavior of the CDLS, so that
R the aural and visual indications are not correctly available.

(b)Do the operational test to make sure that the CDLS operates satisfactorily.

ACTION	RESULT
1. On the Overhead Panel 436VU	On the COCKPIT DOOR panel 119VU of the overhead panel 20VU:
- set the ANN LT switch 6LP to the TEST position.	- the OPEN and FAULT lamps of the indication light 22MQ come on. On the CKPT DOOR CONT panel 20VU: - the three LEDs TOP, MID and BOT STRIKE come on. - the two LEDs CHAN 1 and CHAN 2 come on.
- set the ANN LT switch 6LP to the BRT position.	- the LEDs TOP, MID and BOT STRIKE go off. - the LEDs CHAN 1 and CHAN 2 go off. On the COCKPIT DOOR panel 119VU: - the OPEN and FAULT lamps of the indication light 22MQ go off.
2. On the COCKPIT DOOR panel 119VU:	On the Cockpit Door:
- set and hold the toggle switch 26MQ to the UNLOCK position.	- the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are de-energized and their plungers retract so that the catches are free. - the cockpit door is in the UNLOCK condition.
- release the toggle switch 26MQ.	- the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are energized and their plungers extend so that the catches are blocked. - the cockpit door is in the LOCKED condition. On the COCKPIT DOOR panel 119VU: - the toggle switch 26MQ returns to the NORM position automatically.
3. On the Cockpit Door:	On the COCKPIT DOOR panel 119VU
- turn the D-ring of the door latch mechanism and move the	- the OPEN lamp of the indication light 22MQ comes on.

ACTION	RESULT
door in the open direction.	
	On the Cockpit Door: - the tenons of the door latch mechanism retract so that the cockpit door is unlocked. - the cockpit door moves in the open direction.
- close the door.	On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ goes off. On the Cockpit Door: - the door latch mechanism locks the door automatically.

**ON A/C ALL

(2)Operational Test of the Routine Access
(a)Do the operational test to make sure that the buzzer, the electrical release strike and the key pad operate satisfactorily.

ACTION	RESULT
1. At the LH Door Post of the Cockpit Door: - push the '#' pushbutton or the defined numbered pushbutton plus the '#' pushbutton on the keypad 25MQ.	In the Cockpit: - the buzzer 23MQ operates for minimum of 2 sec. - the cockpit door remains in its locked condition.
2. On the COCKPIT DOOR panel 119VU: - set and hold the toggle switch 26MQ to the UNLOCK position within 30 sec.	On the Key Pad 25MQ: - the green LED comes on. On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are de-energized and their plungers retract so that the catches are free. - the cockpit door is in the UNLOCK condition.
3. On the Cockpit Door: - push or pull the cockpit door in the open direction.	- the cockpit door moves in the open direction. On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication

ACTION	RESULT
	light 22MQ comes on.
4. On the COCKPIT DOOR panel 119VU: - release the toggle switch 26MQ.	- the toggle switch 26MQ returns to the NORM position automatically. On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are energized and their plungers extend so that the catches are blocked. On the Key Pad 25MQ: - the green LED goes off.
5. On the Cockpit Door: - push or pull the cockpit door in the close direction.	On the Cockpit Door: - the door closes and is automatically locked. On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ goes off.
- try to open the cockpit door.	On the Cockpit Door: - the cockpit door does not open.
6. On the key pad 25MQ. - push the '#' pushbutton or the defined numbered pushbutton plus the '#' pushbutton on the keypad 25MQ.	In the Cockpit: - the buzzer operates for a minimum of 2 sec.
7. On the COCKPIT DOOR panel 119VU: - set and hold the toggle switch 26MQ to the LOCK position.	On the key pad 25MQ: - the red LED comes on. On the Cockpit Door: - the cockpit door remains in the locked condition. NOTE: During a peroid between 5 min. and 15 min. the functions of the key pad 25MQ and the buzzer 23MQ are deactivated. It can be reactivated when the toggle switch 26MQ is set to the UNLOCK position.
- release the toggle switch 26MQ.	On the COCKPIT DOOR panel 119VU: - the toggle switch 26MQ returns to the NORM position automatically.

**ON A/C ALL

(3)Operational Test of the Emergency Access
(a)Do the operational test to make sure that the emergency mode operates satisfactorily.

ACTION	RESULT
1. At the LH Door Post of the Cockpit Door: - enter the numerical emergency entry code and press the pushbutton '#' on the key pad 25MQ.	In the Cockpit: - the buzzer 23MQ at the cockpit ceiling comes on. On the COCKPIT DOOR panel 119VU: - the OPEN indication light 22MQ flashes. On the Key Pad 25MQ: - the green LED flashes.
- wait for a defined period of time (adjustable between 15 sec. and 2 min.) to simulate no "flight crew reaction".	On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are de-energized for 5 sec. - the cockpit door is in the UNLOCKED condition. On the COCKPIT DOOR panel 119VU: NOTE : There are two standards of the control unit 24MQ, P/N AR4709-1 and AR4709-3. - with P/N AR4709-1, the OPEN and the FAULT lamps of the indication light 22MQ come on for 5 sec. - with P/N AR4709-3, the OPEN lamp of the indication light 22MQ comes on for 5 sec. On the Key Pad 25MQ: - the green LED come on for 5 sec.
2. On the COCKPIT DOOR: - open the cockpit door and close it again.	On the Cockpit Door: - the cockpit door moves in the open direction and back in its locked position.
3. On the Key Pad 25MQ: - enter the numerical emergency entry code and press the pushbutton	In the Cockpit: - the buzzer 23MQ at the cockpit ceiling comes on.

ACTION	RESULT
'#' on the key pad.	On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ flashes. On the Key Pad 25MQ: - the green LED flashes.
4. On the COCKPIT DOOR panel 119VU - set and hold the toggle switch 26MQ to the UNLOCK position within a defined period of time (adjustable between 15 sec. and 2 min).	On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are de-energized. - the cockpit door is in the UNLOCK condition. On the Key Pad 25MQ: - the green LED comes on. In the cockpit: - the buzzer 23MQ at the cockpit ceiling goes off.
5. On the Cockpit Door: - open the cockpit door and close it again.	On the Cockpit Door: - the door moves in the open direction and back in its locked position.
6. On the COCKPIT DOOR panel 119VU - release the toggle switch 26MQ.	On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are energized. - the cockpit door is in the LOCK condition. On the COCKPIT DOOR panel 119VU: - the toggle switch 26MQ returns to the NORM position.
7. On the Key Pad 25MQ: - enter the numerical emergency entry code and press the pushbutton '#' on the key pad 25MQ.	In the Cockpit: - the buzzer 23MQ at the cockpit ceiling comes on. On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ flashes. On the Key Pad 25MQ: - the green LED flashes.
8. On the Cockpit DOOR panel 119VU: - set and hold the toggle switch 26MQ to the LOCK position within a defined period of time (adjustable between 15 sec. and	On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ stay energized. - the cockpit door remains

ACTION	RESULT
2 min.).	locked. On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ goes off. On the key pad 25MQ: - the green LED goes off. - the red LED comes on. NOTE : During a period of time the functions of the key pad 25MQ and the buzzer 23MQ are de-activated. It can be reacti-vated when the toggle switch 26MQ is set to the UNLOCK position.
- release the toggle switch 26MQ.	On the COCKPIT DOOR panel 119VU: - the toggle switch 26MQ returns to the NORM position automatically.

**ON A/C ALL

(4)Functional Test of the Door Opening Force
(a)Do this test to make sure that the top, center and bottom latch mechanism operate satisfactorily.
(b)Measure the operation force necessary to open the cockpit door with a SPRING BALANCE 20 daN (48 lbf).

ACTION	RESULT
1. On the Cockpit Door: - turn the D-ring of the center latch mechanism through 90 degrees. - pull the cockpit door in the open direction.	On the Cockpit Door: - the tenons of the top, center and bottom latch mechanism retract. - the cockpit door opens. On the cockpit Door Panel 119VU: - the OPEN lamp of the indication light 22MQ comes on.
- release the D-ring and push the cockpit door in the close direction.	- the tenons of the top, center and bottom latch mechanism extend and the cockpit door moves in its closed and locked position.
R 2. On the C/B panel 132VU: - open the circuit breaker 1MQ so that the CDLS is without	On the Cockpit Door: - you can hear a clacking noise from the solenoids of the electrical

ACTION	RESULT
electrical power.	release strikes because they do not have electrical power.
3. On the Cockpit Door: - put the spring balance on the center latch mechanism and pull to measure the force necessary to open the unlocked cockpit door.	On the Cockpit Door: - the cockpit door opens and the operation force must be less than 15.0 daN (33.7213 lbf).
R 4. On the C/B panel 132VU: - close the circuit breaker 1MQ so that the CDLS has electrical power.	On the Cockpit Door: - you can hear a clacking noise from the solenoids of the electrical release strikes.
5. On the Cockpit Door: - move the cockpit door in the close direction	On the Cockpit Door: - the cockpit door is closed and locked.

**ON A/C ALL

(5)Operational Check of all Pressure Sensing Channels for Rapid Decompression

(a)Do the test to make sure that the pressure sensors in the control unit 24MQ operate correctly.

NOTE : In this test a rapid decompression of the cabin pressure is
R simulated with a DECOMPRESSION TEST SIMULATOR AR4728-1
R (referred to as vacuum pump).

ACTION	RESULT
1. On the CKPT DOOR CONT Panel 20VU: - put the vacuum pump in one of the pressure sensor holes and operate it.	On the Cockpit Door: - you can hear a clacking noise from the solenoids of the electrical release strikes because they are momentarily de-energized and energize again as soon as an equal pressure occurs.
2. On the Cockpit Door: - at the same time push the cockpit door from the cabin side to the open position. - close the cockpit door.	On the Cockpit Door: - the cockpit door moves to the open position. - the electrical release strikes

ACTION	RESULT
	operate automatically to lock the cockpit door.
- push the cockpit door from the cabin side.	- the cockpit door does not open.
3. On the CKPT DOOR CONT Panel 20VU: - remove the vacuum pump and put it in the other pressure sensor hole and operate it.	On the Cockpit Door: - you can hear a clacking noise from the solenoids of the electrical release strikes because they are momentarily de-energized and energize again as soon as an equal pressure occurs.
4. On the Cockpit Door: - at the same time push the cockpit door from the cabin side to the open position. - close the cockpit door	On the Cockpit Door: - the cockpit door moves to the open position. - the electrical release strikes operate automatically to lock the cockpit door.

(b)Remove the vacuum pump from the pressure sensor hole of the control unit 24MQ.

**ON A/C ALL

(6)Operational Check of Door Opening in Case of Power Off.
(a)Open the circuit breaker 1MQ to make sure that the Cockpit Door Locking-System (CDLS) is de-energized.
(b)Open the cockpit door from the cabin side by a single push.
(c)Close the cockpit door.
(d)Open the cockpit door from the cockpit side by turning the D-ring and pulling.
(e)Close the circuit breaker 1MQ.

**ON A/C ALL

(7)Operational Check of Door Opening by using the Emergency Code.
(a)Do the operational test to make sure that the emergency mode operates satisfactorily.

ACTION	RESULT
1. At the LH Door Post of the Cockpit Door: - enter the numerical emergency entry code and press the pushbutton '#' on the key pad 25MQ.	In the Cockpit: - the buzzer 23MQ at the cockpit ceiling comes on. On the COCKPIT DOOR panel 119VU: - the OPEN indication light 22MQ flashes. On the Key Pad 25MQ: - the green LED flashes.
- wait for a defined period of time (adjustable between 15 sec. and 2 min.) to simulate no "flight crew reaction".	On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are de-energized for 5 sec. - the cockpit door is in the UNLOCKED condition. On the COCKPIT DOOR panel 119VU: NOTE : There are two standards of the control unit 24MQ, P/N AR4709-1 and AR4709-3. - with P/N AR4709-1, the OPEN and the FAULT lamps of the indication light 22MQ come on for 5 sec. - with P/N AR4709-3, the OPEN lamp of the indication light 22MQ comes on for 5 sec. On the Key Pad 25MQ: - the green LED comes on for 5 sec.
2. On the COCKPIT DOOR: - open the cockpit door and close it again.	On the Cockpit Door: - the cockpit door moves in the open direction and back in its locked position.
3. On the Key Pad 25MQ: - enter the numerical emergency entry code and press the pushbutton '#' on the key pad.	In the Cockpit: - the buzzer 23MQ at the cockpit ceiling comes on. On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ flashes. On the Key Pad 25MQ: - the green LED flashes.
4. On the COCKPIT DOOR panel 119VU - set and hold the toggle switch	On the Cockpit Door: - the solenoids of the electrical

ACTION	RESULT
26MQ to the UNLOCK position within a defined period of time (adjustable between 15 sec. and 2 min).	release strikes 30MQ, 31MQ and 32MQ are de-energized. - the cockpit door is in the UNLOCK condition. On the Key Pad 25MQ: - the green LED comes on. In the cockpit: - the buzzer 23MQ at the cockpit ceiling goes off.
5. On the Cockpit Door: - open the cockpit door and close it again.	On the Cockpit Door: - the door moves in the open direction and back in its locked position.
6. On the COCKPIT DOOR panel 119VU - release the toggle switch 26MQ.	On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ are energized. - the cockpit door is in the LOCK condition. On the COCKPIT DOOR panel 119VU: - the toggle switch 26MQ returns to the NORM position.
7. On the Key Pad 25MQ: - enter the numerical emergency entry code and press the pushbutton '#' on the key pad 23MQ.	In the Cockpit: - the buzzer 25MQ at the cockpit ceiling comes on. On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ flashes. On the Key Pad 25MQ: - the green LED flashes.
8. On the Cockpit DOOR panel 119VU: - set and hold the toggle switch 26MQ to the LOCK position within a defined period of time (adjustable between 15 sec. and 2 min.).	On the Cockpit Door: - the solenoids of the electrical release strikes 30MQ, 31MQ and 32MQ stay energized. - the cockpit door remains locked. On the COCKPIT DOOR panel 119VU: - the OPEN lamp of the indication light 22MQ goes off. On the key pad 25MQ: - the green LED goes off. - the red LED comes on. NOTE : During a period of time the functions of the key pad 25MQ

ACTION	RESULT
	and the buzzer 23MQ are deactivated. It can be reactivated when the toggle switch 26MQ is set to the UNLOCK position.
- release the toggle switch 26MQ.	On the COCKPIT DOOR panel 119VU: - the toggle switch 26MQ returns to the NORM position automatically.

C. Close-Up
(1)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(2)De-energize aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

R PASSENGER COMPARTMENT FIXED PARTITION INTERIOR DOORS
R INSPECTION/CHECK

1. Reason for the Job

A. Detailed Inspection of Mechanical Parts of Door Locking System

2. Equipment and Materials

ITEM	DESIGNATION
A. Material No. 19-003	Lint-Free Cotton Cloth (Ref. 20-31-00)
B.	Brush-Bristled, Soft
C. Material No. 11-010	Cleaning Agents (Ref. 20-31-00)
D.	Circuit Breaker Safety Clip

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control

3. Procedure

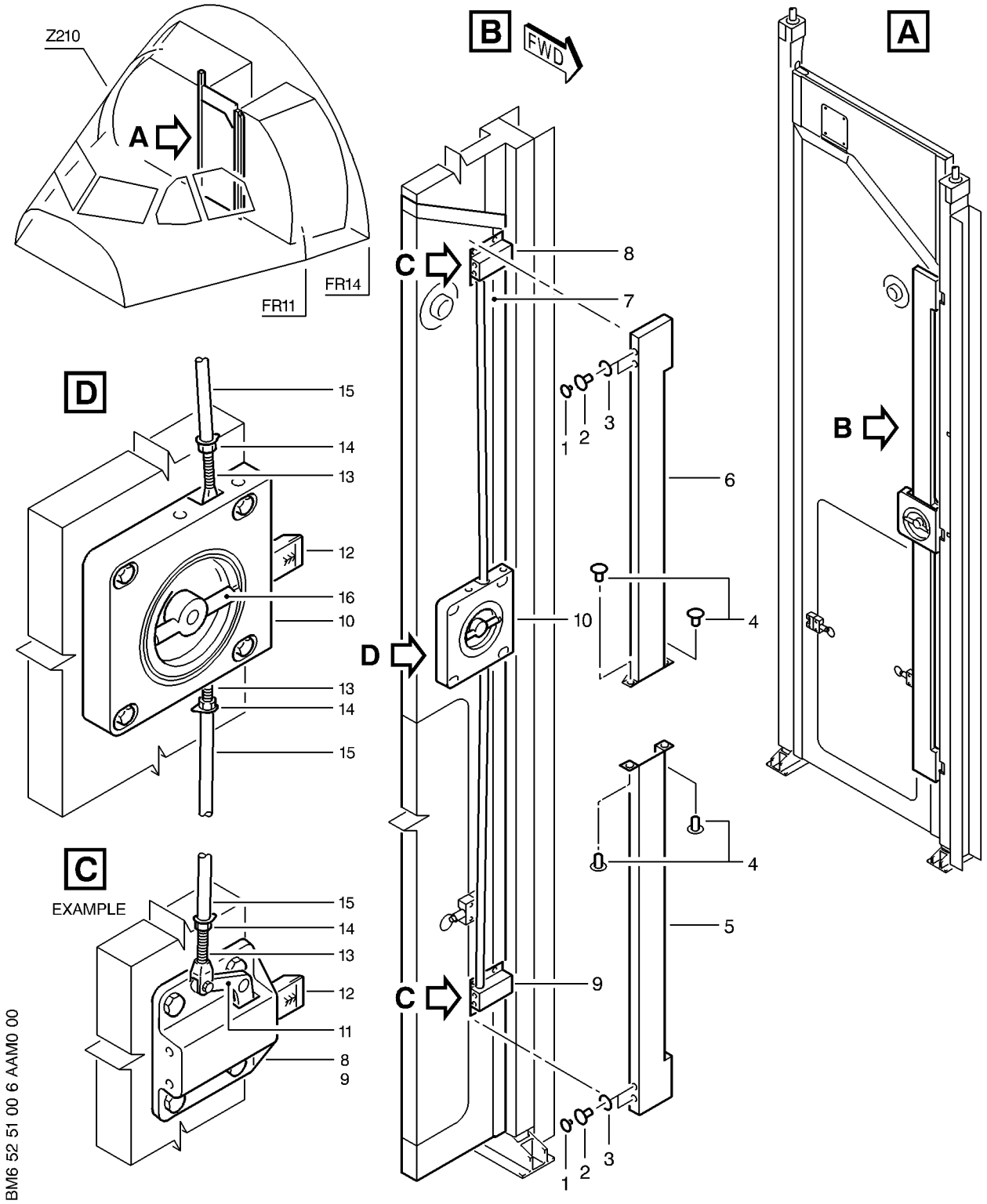
A. Job Set-Up
(1)Make sure that the cockpit door is open.
(2)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

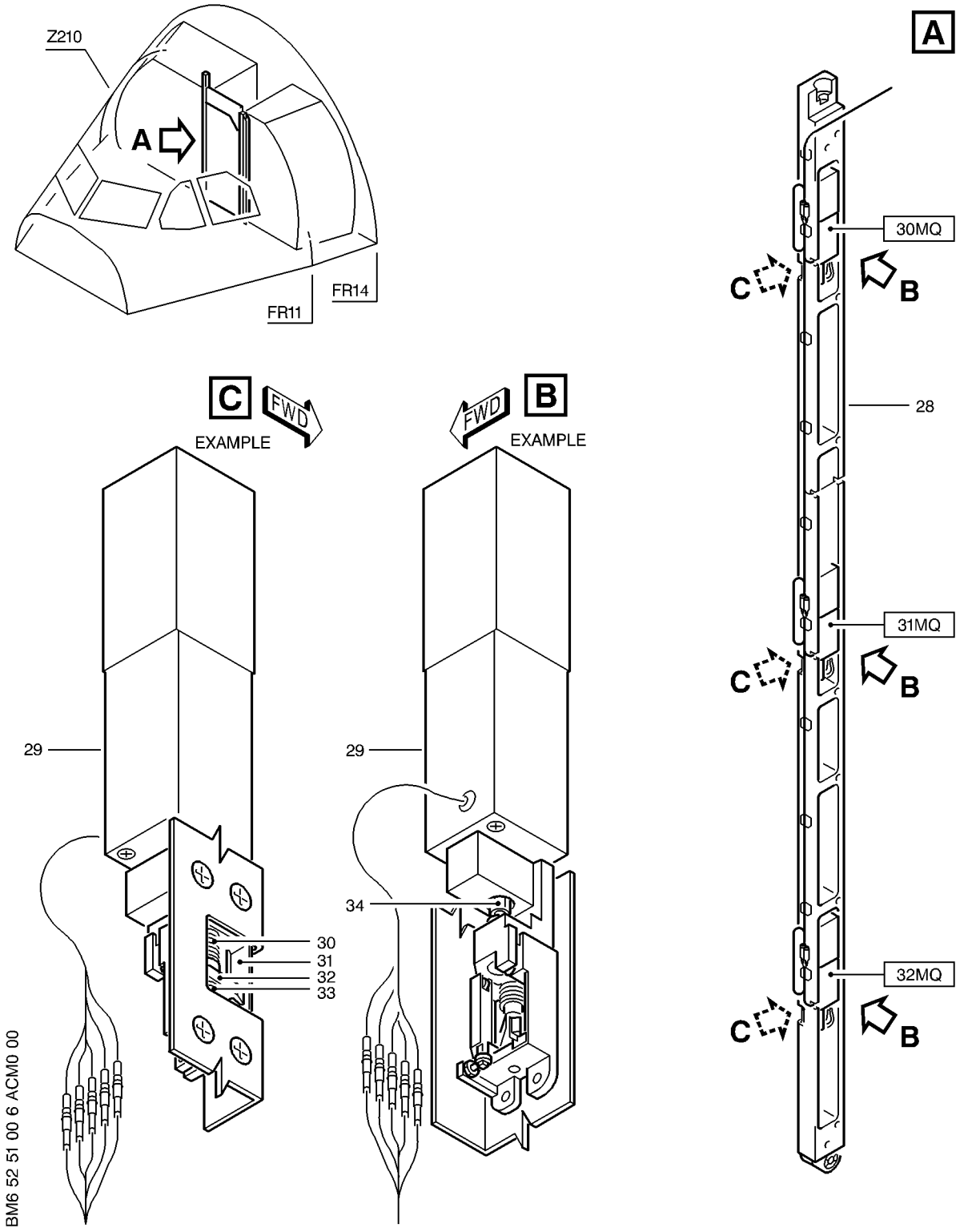
B. Preparation for Inspection

(Ref. Fig. 601)
(Ref. Fig. 602)
(1)Remove the cover of the door bolting mechanism as follows:
(a)Remove the plugs (1) from the screws (2).
(b)Remove the screws (2), the washers (3), the fasteners (4) and the covers (5) and (6) from the cockpit door (7).
(c)Remove the left side door post (28) (Ref. 52-51-11, P. Block 401).
(2)Clean the Cockpit Door Bolting Mechanism:

WARNING : MAKE SURE THAT THERE IS A GOOD FLOW OF AIR THROUGH THE WORK WORK AREA WHEN YOU USE SPECIAL MATERIALS.
IF YOU GET ONE OF THESE MATERIALS ON YOUR SKIN, IN YOUR MOUTH OR IN YOUR EYES:
- FLUSH IT AWAY WITH A FLOW OF CLEAN WATER FOR BETWEEN 10 TO 15 MINUTES
- GET IMMEDIATE MEDICAL AID IF IRRITATION OCCURS.
DO NOT BREATHER THE FUMES FROM THE MATERIAL.



Mechanical Parts of the Cockpit Door
Figure 601



Mechanical Parts of the Electrical Release Strikes
Figure 602

DO NOT SMOKE WHEN YOU USE THE MATERIAL.
SDO NOT USE THE MATERIAL NEAR A FLAME, SPARKS OR SOURCES OF HEAT.
THESE MATERIALS ARE DANGEROUS: THEY ARE POISNOUS, FLAMMABLE AND SKIN IRRITANTS.

WARNING : OBEY THE MANUFACTURER'S INSTRUCTIONS WHEN YOU USE THIS/ THESE MATERIAL/S.
USE PROTECTIVE CLOTHING, RUBBER GLOVES AND GOGGLES.

(a)Clean the components that follow with a soft-bristled brush or a lint-free cotton cloth (Mat. No. 19-003) and the cleaning agent (Mat. No.11-010)
- the latch assemblies (8),(9) and (10)
- the latch tenons (12)
- the D-ring mechanism (16)
- the tie-rods (15)
- the eye-ends (13)
- the connecting levers (11).

(b)Dry the cleaned components with a dry and clean lint-free cotton cloth.

C. Inspection
(1)Detailed Inspection of the Mechanical Parts of the Door Locking System
(a)Examine the electrical release strikes (29) for:
- wear and cracks of the catch (31) and the cam (32)
- wear and broken coils of the springs (30) and (33)
- wear and cracks of the catch release pin (34)
- burned or broken wires of the electrical cables
- rough or worn areas of the cable insulation in the areas of the cables, that you can see.

(b)Examine the door bolting system for:
- wear, cracks, distortion and other damage of the latch assemblies (8),(9) and (10)
- cracks, distortion, free movement and other damage of the D-ring (16)
- cracks, wear, distortion and other damage of the tie-rods (15), the eye-ends (13) and the connecting levers (11)
- missing or broken lockwire (14).

(c)If you find a defective component, you must replace it.

D. Close-Up
(1)Install the left side door post (28) (Ref. 52-51-11, P. Block 401).
(2)Put the covers (5) and (6) in their installation positions on the cockpit door (7).
(3)Install the fasteners (4), the washers (3) and the screws (2).
(4)Install the plugs (1) in the screws (2).
(5)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(6)Make certain that the circuit breaker opened before is closed.
(7)De-energize aircraft electrical network and disconnect electrical

ground power unit (Ref. 24-41-00, P. Block 301).

R 1. Repair of the Cockpit Door

R A. Reason for the Job
To repair the upper edge of the cockpit door.

R B. Equipment and Materials

ITEM	DESIGNATION
A. Material No. 08-051	Bonding and Adhesive Compounds (Ref. 20-31-00)
B. Material No. 11-003	Cleaning Agents (Ref. 20-31-00)
C. Material No. 19-003	Miscellaneous (Ref. 20-31-00)
No specific	Abrasive cloth grade 80 to 150
No specific	Adhesive tape
No specific	Metal sheet AMS 5518-008
Referenced Procedures	
- 24-41-00, P. Block 301	A/C External Power Control
- 33-21-13, P. Block 201	Cockpit Door Limit Switch

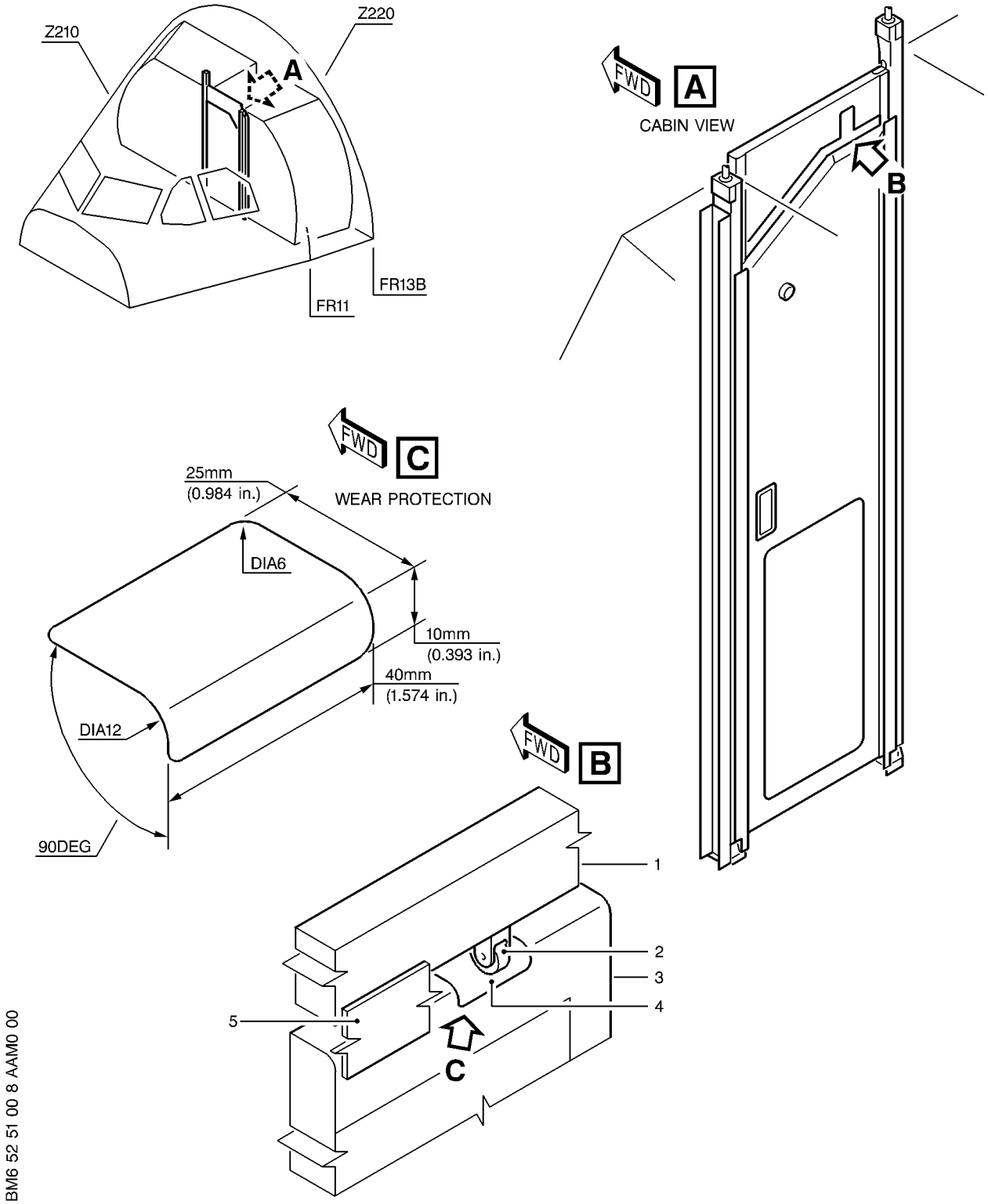
R C. Procedure
R (1)Job Set-Up
R (a)Open the cockpit door.
R (b)Connect the electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (c)Make sure that the electronics racks ventilation is correct.

R (2)Repair of the Cockpit-Door Upper Edge
(Ref. Fig. 801)

WARNING : CLEANING OPERATIONS USING SOLVENTS SHOULD BE PERFORMED IN A WELL VENTILATED ATMOSPHERE. EXERCISE NORMAL SAFETY PRECAUTIONS DURING USE.

WARNING : DO NOT GET METHYL ETHYL KETONE (MEK) IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM MEK. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE MEK. KEEP MEK AWAY FROM SPARKS, FLAME AND HEAT. MEK IS A POISONOUS AND FLAMMABLE SOLVENT WHICH CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

R (a)Make a protection plate (4) as shown in figure "C".
R 1 Use metal sheet AMS 5518-008.
R 2 Deburr all the edges.
R (b)Prepare the damaged area for bonding as follows:
R 1 Remove burrs from the aluminium profile (3).
R 2 Use the protection plate (4) as a template to limit the adhesive area on the aluminium profile.



Repair of the Cockpit-Door Upper Edge
Figure 801

R 3 Use the adhesive tape to show the limits of the bonded area.
R 4 Rub the mating surfaces with the abrasive cloth grade 80 to 150 to get good surfaces for the bond.
R 5 Clean the mating surfaces with a lint-free cotton cloth MISCELLANEOUS (Mat. No. 19-003) and the CLEANING AGENTS (Material No. 11-003).
R (c)Bond the protection plate (4) as follows:
R 1 Apply the BONDING AND ADHESIVE COMPOUNDS (Mat. No. 08-051) on the adhesive surface. Make sure that the adhesive fills the damaged surface.
R 2 Let the BONDING AND ADHESIVE COMPOUNDS (Mat. No. 08-051) cure. Use the adhesive tape to hold the protection plate (4) in position as the adhesive cures.
R (d)Clean the repaired area as follows:
R 1 Remove the adhesive tape and clean the surface with a lint-free cotton cloth MISCELLANEOUS (Mat. No. 19-003) and the CLEANING AGENTS (Material No. 11-003).
R 2 Check the adjustment of the aisle light dimming switch (Ref. 33-21-13, P. Block 201).

R (3)Close-Up
R (a)Make sure that the work area is clean and clear of tool(s) and other items.
R (b)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

R 2. Repair of the Door Escape Hatch

R A. Reason for the Job
R To repair possible impact/scratches on the door escape hatch.

R B. Equipment and Materials

ITEM	DESIGNATION
A. Material No. 05-084	Decor Foil (Ref. 20-31-00)
B. Material No. 08-008	Plastic Filler (Ref. 20-31-00)
C. Material No. 11-010	Cleaning Agent (Ref. 20-31-00)
D. Material No. 16-047	Decorative Paint (Ref. 20-31-00)
E. Material No. 19-003	Miscellaneous (Ref. 20-31-00)
No specific	Paper-Abrasive (Grade 80 to 150)
No specific	S-Glass Patch (ABS 5653A or AIMS 13-01-003-02)
No specific	Bonding and Adhesive Compound (AIMS 10-04-001)
No specific	Aluminum Sheet (Material A13.1364 or A12024)
No specific	Hot Air Blower (max. operating 370 deg C (700 deg F)
No specific	Spatula - Non Metallic
No specific	Paper-Abrasive (Grade 320)

R Referenced Procedures
R - 25-66-00, P. Block 501 Operational Check of Decompression Flap

R Release Mechanism
R - 25-66-45, P. Block 401 Cockpit Door Decompression-Flap

R C. Procedure
R (Ref. Fig. 802)
R (1)Job Set-Up
R (a)Remove the door escape hatch from the cockpit door (Ref. 25-66-45, P. Block 401).
R (2)Detailed Inspection of the Door Escape Hatch
R (a)Do a visual inspection of the door escape hatch to find a possible damage.
R (b)Measure the depth of the found damage to make sure that a repair is permitted.

R NOTE : The maximum permitted depth of the damage is 1.0 mm (0.0393 in). The reference plane is the surface of the decor foil.

R (c)If the damage is more than 1.0 mm (0.04 in.) but less than 4.0 mm (0.16 in.), do the temporary repair (refer to para. (5)) or replace the door escape hatch before the next flight.

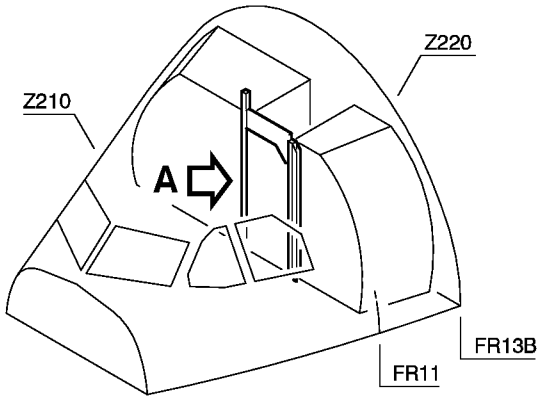
R (2)Easy Repair of the Decor Foil (Scratch)

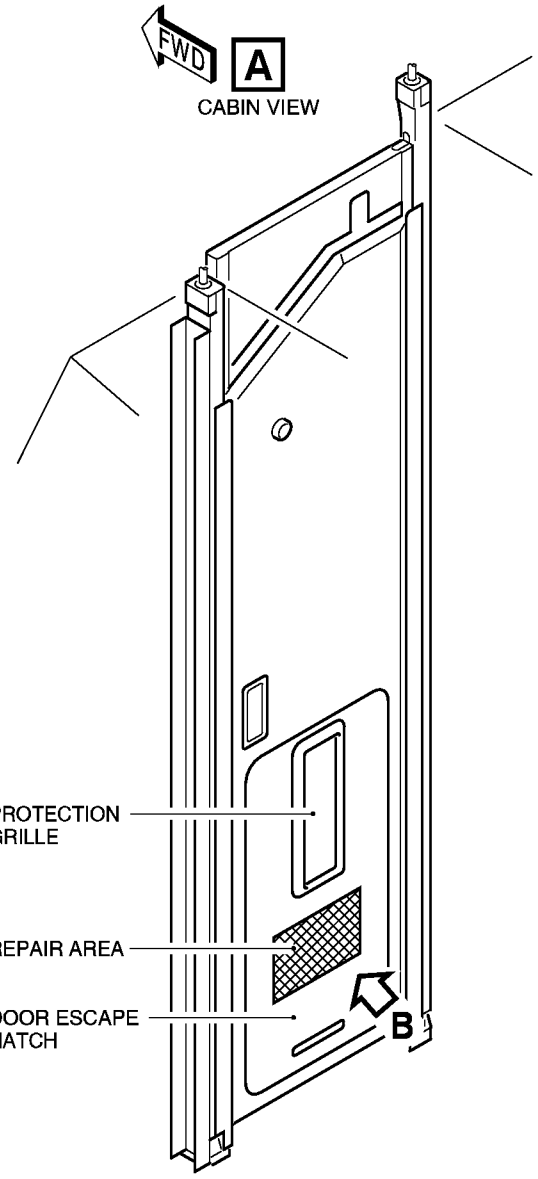
R WARNING : USE SOLVENTS/CLEANING AGENTS, SEALANT AND OTHER SPECIAL MATERIALS ONLY WITH A GOOD FLOW OF AIR THROUGH THE WORK AREA. THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND SKIN IRRITANTS. OBEY THE MANUFACTURERS INSTRUCTIONS. PUT ON PROTECTIVE CLOTHING. DO NOT GET THEM IN YOUR MOUTH. DO NOT SMOKE. DO NOT BREATHE THE GAS. GET MEDICAL HELP IF YOUR SKIN OR EYES BECOME IRRITATED.

R (a)Clean the damaged area with CLEANING AGENTS (Mat. No. 11-010) and a lint-free cotton cloth, MISCELLANEOUS (Mat. No. 19-003).
R (b)Apply structure paints (Mat. No. 16-047) to the damaged area.

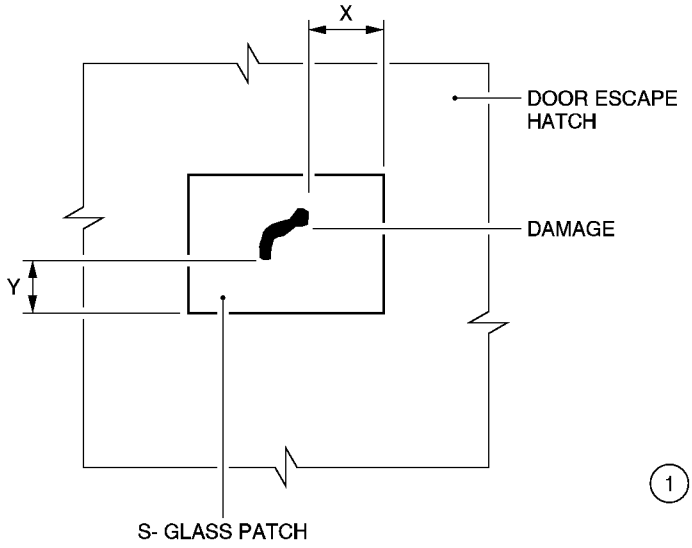
R (4)Common Repair
R NOTE : This repair is only applicable for damage up to 1.0 mm (0.04 in.).

R (a)Remove the decor foil as follows:
R 1 Carefully cut the decor foil around the damaged area and peel off the edges.
R 2 Make sure that you do not damage the surface of the inner S-glass sheet.
R 3 Use a HOT AIR BLOWER MAX OPERATING 370 DEG C (700 DEG F) to apply heat to the edges of the decor foil. Do this until they have a maximum of 95 deg.C (203.00 deg.F) and not longer than 10 minutes.
R 4 Carefully remove the decor foil with a SPATULA - NON METALLIC and make sure that all loose particles are removed.
R (b)Prepare the repair area as follows:





B
TEMPORARY REPAIR



DIMENSION TABLE	
X	25mm (0.984 in.)
Y	25mm (0.984 in.)

NOTE:

(1) COVERED WITH NEW DECOR FOIL OR WITH ALUMINIUM SHEET

BM6 52 51 00 8 ACM0 00

R

Repair of the Door Escape Hatch
Figure 802

R WARNING : USE SOLVENTS/CLEANING AGENTS, SEALANTS AND OTHER SPECIAL
R MATERIALS ONLY WITH A GOOD FLOW OF AIR THROUGH THE WORK AREA.
R THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND SKIN IRRITANTS.
R OBEY THE MANUFACTURERS INSTRUCTIONS.
R PUT ON PROTECTIVE CLOTHING.
R DO NOT GET THEM IN YOUR MOUTH.
R DO NOT SMOKE.
R DO NOT BREATHE THE GAS.
R GET MEDICAL HELP IF YOUR SKIN OR EYES BECOME IRRITATED.

R CAUTION : USE ONLY THE SPECIFIED MATERIALS AND OBEY THE INSTRUCTIONS
R FROM THE MANUFACTURERS. OTHER MATERIALS CAN CAUSE DAMAGE TO THE
R SURFACE PROTECTION OF THE COMPONENTS AND THE RELATED AREA.

R 1 Clean the repair area with CLEANING AGENTS (Material No. 11-010) and
R a lint-free cotton cloth, MISCELLANEOUS (Mat. No. 19-003).
R 2 Let the surface dry for 15 minutes.
R 3 If necessary, apply a filler, BONDING AND ADHESIVE COMPOUNDS
R (Mat. No. 08-008), to the damage to get a smooth surface.
R 4 Obey the manufacturers instructions and let the filler dry.
R 5 Prepare the damaged area with PAPER - ABRASIVE (GRADE 320) to get a
R smooth surface.
R 6 Clean the damaged area with CLEANING AGENTS (Mat. No. 11-010)
R and a lint-free cotton cloth, MISCELLANEOUS (Mat. No. 19-003).
R 7 Let the surface dry for 15 minutes.
R (c)Cover the repair area with a new decor foil as follows:
R NOTE : The repair area can also be covered with an aluminum sheet
R for additional protection (refer to para. (d)).
R 1 Prepare a piece of new decor foil, SPECIAL MATERIALS (Mat. No.
R 05-074), with the same dimension as the repair area.
R 2 Carefully remove the protective layer from the decor foil and put it
R on the repair area.
R 3 Push the decor foil with your hand and make sure that it bonds
R correctly.
R (d)Cover the repair area with an ALUMINUM SHEET as follows:

R CAUTION : THE ALUMINUM SHEET MUST NOT OVERLAP THE GAP BETWEEN THE DOOR
R ESCAPE HATCH AND THE COCKPIT DOOR.

R 1 Cut an ALUMINUM SHEET (Material A13.1364 or A12024) with a thickness
R of 1.6 mm (0.063 in.) to the same dimensions as the repair area.

R NOTE : The aluminum sheet must not exceed 250 sq. cm
R (38.750 sq. in.).

R 2 Roughen the mating surface of the aluminum sheet with PAPER-ABRASIVE
R (GRADE 80 TO 150).
R 3 Bond the aluminum sheet to the repair area with BONDING AND ADHESIVE
R COMPOUNDS (Mat. No. 08-010A).

R NOTE : The aluminum sheet must not overlap the surrounding decor

R foil in order to provide sufficient bonding strength in the
R edge zone.

R (5)Temporary Repair

R NOTE : This repair is limited to a period of three months.

R (a)Remove the decor foil as follows:
R 1 Carefully cut the decor foil around the damaged area and peel off the edges.
R 2 Make sure that you do not damage the surface of the inner S-glass sheet.
R 3 Use a HOT AIR BLOWER MAX OPERATING 370 DEG C (700 DEG F) to apply heat to the edges of the decor foil. Do this until they have a maximum of 95 deg.C (203.00 deg.F) and not longer than 10 minutes.
R 4 Carefully remove the decor foil with a SPATULA - NON METALLIC and make sure that all loose particles are removed.
R (b)Prepare the repair area as follows:

R WARNING : USE SOLVENTS/CLEANING AGENTS, SEALANTS AND OTHER SPECIAL
R MATERIALS ONLY WITH A GOOD FLOW OF AIR THROUGH THE WORK AREA.
R THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND SKIN IRRITANTS.
R OBEY THE MANUFACTURERS INSTRUCTIONS.
R PUT ON PROTECTIVE CLOTHING.
R DO NOT GET THEM IN YOUR MOUTH.
R DO NOT SMOKE.
R DO NOT BREATHE THE GAS.
R GET MEDICAL HELP IF YOUR SKIN OR EYES BECOME IRRITATED.

R CAUTION : USE ONLY THE SPECIFIED MATERIALS AND OBEY THE INSTRUCTIONS
R FROM THE MANUFACTURERS. OTHER MATERIALS CAN CAUSE DAMAGE TO THE
R SURFACE PROTECTION OF THE COMPONENTS AND THE RELATED AREA.

R 1 Clean the repair area with CLEANING AGENTS (Material No. 11-010) and a lint-free cotton cloth, MISCELLANEOUS (Mat. No. 19-003).
R 2 Let the surface dry for 15 minutes.
R 3 If necessary, apply a filler, BONDING AND ADHESIVE COMPOUNDS (Mat. No. 08-008), to the damage to get a smooth surface.
R 4 Obey the manufacturers instructions and let the filler dry.
R 5 Prepare the damaged area with PAPER - ABRASIVE (GRADE 320) to get a smooth surface.
R 6 Clean the damaged area with CLEANING AGENTS (Mat. No. 11-010) and a lint-free cotton cloth, MISCELLANEOUS (Mat. No. 19-003).
R 7 Let the surface dry for 15 minutes.

R (c)Cover the repair area with an S-GLASS PATCH as follows:
R 1 Cut the S-GLASS PATCH (ABS 5653A or AIMS 13-01-003-02) with a thickness of 4.0 mm (0.16 in.) to the necessary dimensions:
R - the S-glass patch must overlap the damaged border at least 25.0 mm (0.98 in.) in any direction and must not exceed a maximum of 625 sq.cm (96.875 sq.in.)

R - if the distance of the damaged area to the next edge is less than
R 25.0 mm (0.98 in.), the S-glass patch must be sized to fit
R with the related edge.
R 2 If necessary, peel off the protection ply from the S-glass patch.
R 3 Apply a **BONDING AND ADHESIVE COMPOUND (AIMS 10-04-001)** to the
R repair area and the mating surface of the S-glass patch.
R 4 Press the S-glass patch on the repair area and manually remove
R the superfluous adhesive from the repair area.

R NOTE : Refer to the manufacturer instruction for the curing time
R of the **BONDING AND ADHESIVE COMPOUND (AIMS 10-04-001)**.

R 5 Make sure that the S-glass patch does not overlap the surrounding
R decor foil in order to provide sufficient bonding strength in the
R edge zone.

R D. Test
R (1)Do the operational check of the evacuation and decompression panel
R (Ref. 25-66-00, P. Block 501).

R E. Close-Up
R (1)Install the door escape hatch in the cockpit door (Ref. 25-66-45,
R P. Block 401).
R (1)Job Set-Up
R (a)Remove the door escape hatch from the cockpit door (Ref. 25-66-45,
R P. Block 401).

R **ON A/C ALL

FIXED INTERIOR DOORS IN PASSENGER COMPARTMENT - DEACTIVATION/REACTIVATION

**ON A/C ALL

1. Deactivation of the Cockpit Door Locking System (CDLS)
REF: MMEL Sect. 1-52, Item 6-B) Cockpit Door Locking System (CDLS)

A. Reason for the Job
To deactivate the Cockpit Door Locking System (CDLS)

B. Equipment and Materials

ITEM	DESIGNATION
B.	Circuit Breaker Safety Clips and Tags

Referenced Procedure
- 24-41-00, P. Block 301 — AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.
(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(2)Deactivation of the Cockpit Door Locking System (CDLS).

NOTE : Any part of the CDLS may be inoperative provided the complete system is deactivated in the unlocked position and is not required by operational regulations for the intended flight.

(a)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

NOTE : The CDLS is deactivated when you have opened the circuit breaker 1MQ.

(b)Put a warning notice on the circuit breaker panel 132VU, that the CDLS is deactivated.
(3)Close-Up

(a)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).
(b)Make certain that work area is clean of tools and miscellaneous items of equipment.
(c)Make an entry in the aircraft technical log that the cockpit door lock system is deactivated.

**ON A/C ALL

2. Reactivation of the Cockpit Door Lock System (CDLS)

A. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clip

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-51-00, P. Block 501	Fixed Interior Doors in Passenger Compartment
- TSM 52-51-00	Cockpit Door Lock

B. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.
(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(2)Reactivation of the Cockpit Door Locking System (CDLS)
(a)Remove the safety clip and tag and close the following circuit breaker: 1MQ.
(b)Do the trouble shooting procedure (Ref. TSM 52-51-00) to eliminate the malfunction of the CDLS.
(3)Tests
(a)Do the operational test to make sure that the CDLS operates satisfactorily (Ref. 52-51-00, P. Block 501).
(4)Close-Up
(a)Remove the warning notice from the circuit panel 132VU.
(b)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).
(c)Make certain that work area is clean of tools and miscellaneous items of equipment.
(d)Remove the deactivation entry from the aircraft technical log.

**ON A/C ALL

3. Deactivation of the Keypad
REF: MMEL Sect. 1-52, Item 6-B) - i) - 1) Keypad

A. Reason for the Job
To deactivate the keypad of the Cockpit Door Lock System (CDLS)

B. Equipment and Materials

ITEM	DESIGNATION
A.	Blanking Caps
B.	Circuit Breaker Safety Clips and Tags
C.	Tie-Wraps

Referenced Procedure

- 24-41-00, P. Block 301	AC External Power Control

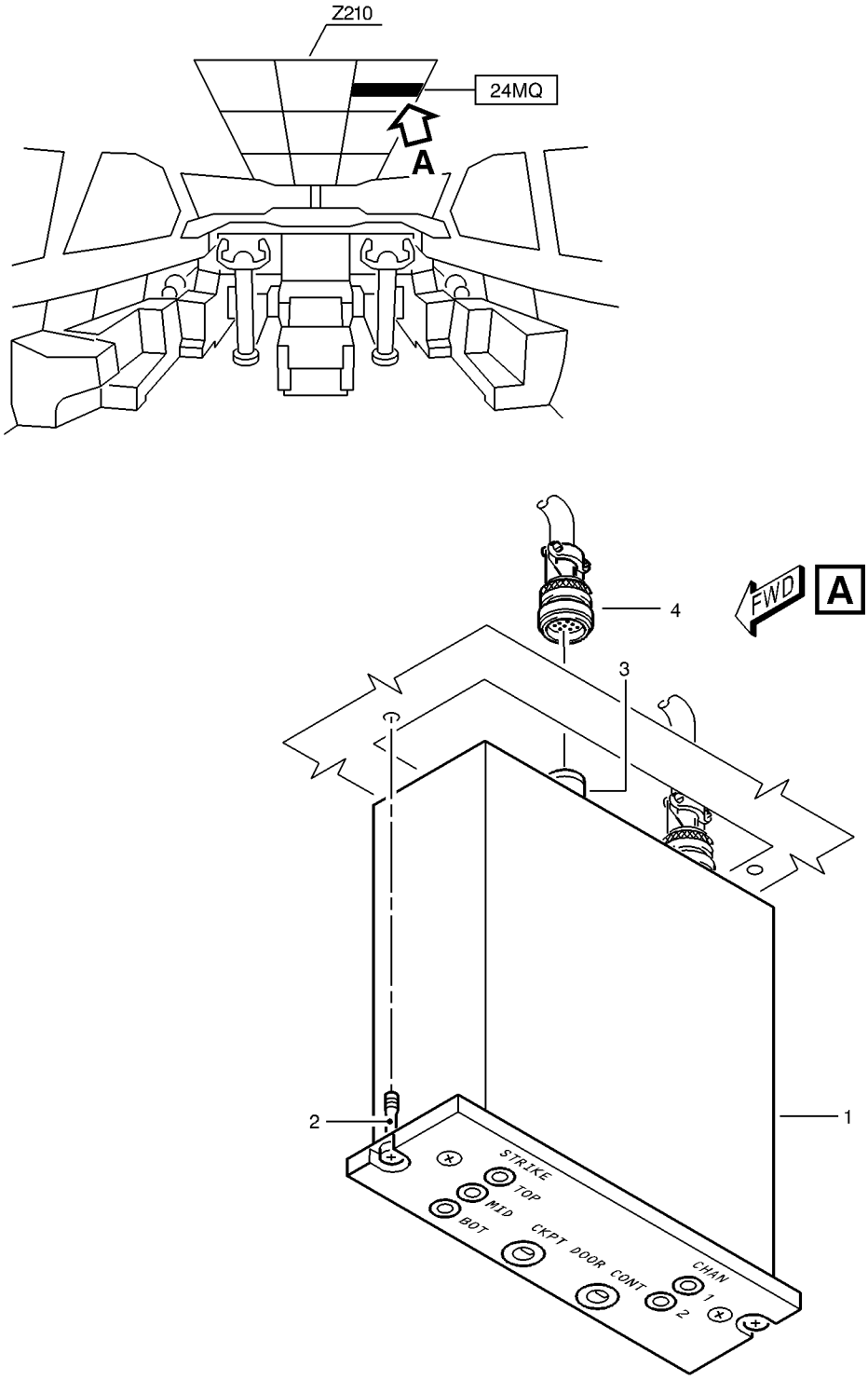
C. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.
(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(2)Deactivation of the Keypad.
(Ref. Fig. 901)
CAUTION : MAKE SURE THAT THE COCKPIT DOOR DOES NOT CLOSE DURING OR AFTER THE DEACTIVATION PROCEDURE, WITH NO PERSON IN THE COCKPIT.

NOTE : If the cockpit door closes during the deactivation procedure and no person is in the cockpit, de-energize the aircraft electrical circuits to open the door.

(a)Hold the front face of the control unit (1) to support it and loosen the captive screws (2).
(b)Carefully remove the control unit (1) until you get access to the electrical connector (4).
(c)Disconnect the electrical connector (4) from the receptacle (3).
(d)Put blanking caps on the disconnected electrical connector (4) and on the receptacle (3).
(e)Safety the electrical connector (4) with tie-wraps, to the adjacent fuselage structure.
(f)Carefully install the control unit (1) and tighten the captive screws (2).
(g)Put a warning notice on the overhead panel 20VU to tell persons that the control unit (1) is deactivated.
(3)Close-Up
(a)Remove the safety clip and tag and close the following circuit breaker: 1MQ.



BM6 52 51 00 9 AAM0 01

Control Unit - Deactivation/Reactivation
Figure 901

R

(b)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).
(c)Make certain that work area is clean of tools and miscellaneous items of equipment.
(d)Make an entry in the aircraft technical log that the keypad of the cockpit door lock system is deactivated.

4. Reactivation of the Keypad

A. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clip

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-51-00, P. Block 501	Fixed Interior Doors in Passenger Compartment
- TSM 52-51-00	Cockpit Door Lock

B. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.
(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(3)Reactivation of the Keypad (Ref. Fig. 901)

CAUTION : MAKE SURE THAT THE COCKPIT DOOR DOES NOT CLOSE DURING OR AFTER THE DEACTIVATION PROCEDURE, WITH NO PERSON IN THE COCKPIT.

(a)Hold the front face of the control unit (1) and loosen the captive screws (2).
(b)Carefully remove the control unit (1) until you get access to the electrical connector (4).
(c)Cut, remove and discard the tie-wraps to release the temporarily attached connector (4) from the adjacent fuselage structure.
(d)Remove the blanking caps from the electrical connector (4) and the receptacle (3).
(e)Make sure that the electrical connector (4) and the receptacle (3) are clean and in the correct condition.
(f)Connect the electrical connector (4) to the receptacle (3).
(g)Carefully install the control unit (1) and attach it with the captive screws (2).
(h)Do the trouble shooting procedure (Ref. TSM 52-51-00, P. Block 101) to eliminate the malfunction of the keypad.

(3)Tests
(a)Remove the safety clip and tag and close the following circuit breaker: 1MQ.
(b)Do the operational test to make sure that the CDLS operates satisfactorily (Ref. 52-51-00, P. Block 501).
(4)Close-Up
(a)Remove the warning notice from the overhead panel 20VU.
(b)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).
(c)Make certain that work area is clean of tools and miscellaneous items of equipment.
(d)Remove the deactivation entry from the aircraft technical log.

5. Deactivation of the Door Release Strike

REF: MMEL Sect. 1-52, Item 6-B) - j) Door Release Strike (Catch, Spring, Solenoid, Bolt)

A. Reason for the Job
To deactivate the door release strike of the Cockpit Door Lock System (CDLS)

B. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips and Tags
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

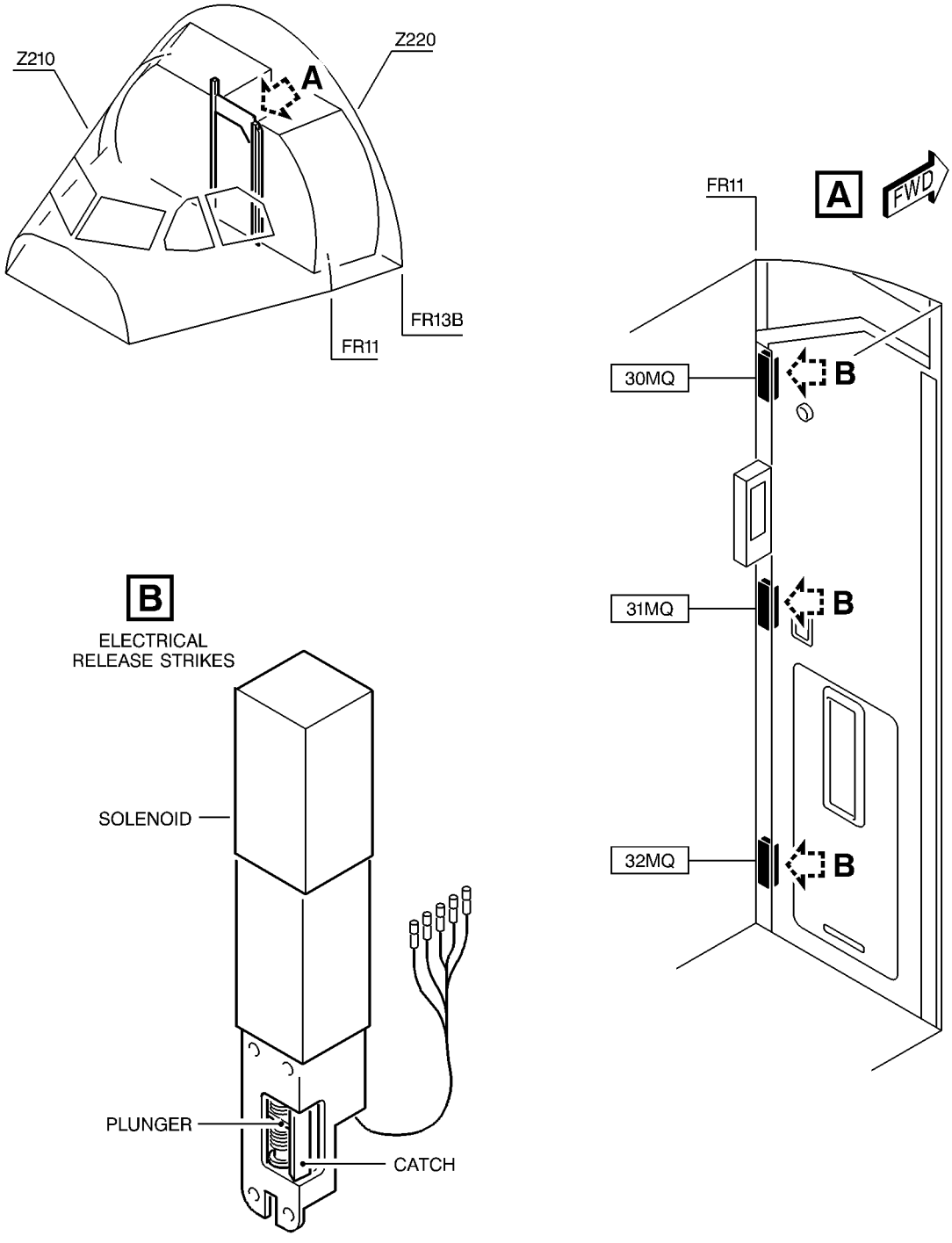
C. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.
(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(2)Deactivation of the Door Release Strike.
(Ref. Fig. 902)

**ON A/C ALL

(a)Turn the D-ring of the latch mechanism and open the cockpit door.
(b)Manually move the catch of the inoperative electrical release strike



BM6 52 51 00 9 ACM0 00

Door Release Strike
Figure 902

R

to check that it moves freely.

(c)If the catch is blocked by the plunger, remove the failed electrical release strike (Ref. 52-51-12, P. Block 401).

NOTE : Leave the jiffy junction connectors at the A/C wire harness for isolation reasons, to prevent short circuit.

(d)If the catch moves freely, disconnect only the electrical connections between A/C wire harness and the applicable release strike cables (Ref. 52-51-12, P. Block 401).

NOTE : Leave the jiffy junction connectors at the A/C wire harness for isolation reasons to prevent short circuit.

R NOTE : The A/C wires 4 and 7 of the center release strike must
R stay connected. This is to keep the OPEN light of the indi-
R cation light 22MQ serviceable.

(e)Make sure that the remaining electrical release strikes operate satisfactorily (Ref. 52-51-00, P. Block 501).

(f)Put a warning notice on the door post to tell persons that the applicable electrical release strike is deactivated or removed.

(3)Close-Up

(a)Remove the safety clip and tag and close the following circuit breaker: 1MQ.

(b)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).

(c)Make certain that work area is clean of tools and miscellaneous items of equipment.

(d)Make an entry in the aircraft technical log that the applicable electrical release strike of the cockpit door lock system is de-activated.

**ON A/C ALL

6. Reactivation of the Door Release Strike

A. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clip

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-51-00, P. Block 501	Fixed Interior Doors in Passenger Compartment
- 52-51-12, P. Block 401	Electrical Release Strike

B. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.
(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(2)Reactivation of the Door Release Strike
(a)If removed, install the applicable electrical release strike (Ref. 52-51-12, P. Block 401).
(b)If not, replace the failed electrical release strike (Ref. 52-51-12, P. Block 401).
(3)Tests
(a)Remove the safety clip and tag and close the following circuit breaker: 1MQ.
(b)Do the operational test to make sure that the CDLS operates satisfactorily (Ref. 52-51-00, P. Block 501).
(4)Close-Up
(a)Remove the warning notice from the door post.
(b)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).
(c)Make certain that work area is clean of tools and miscellaneous items of equipment.
(d)Remove the deactivation entry from the aircraft technical log.

**ON A/C ALL

7. Verification of the Pressure Rate Sensor
REF: MMEL Sect. 1-52, Item 6-B) -k)-1) Pressure Rate Sensor

A. Reason for the Job
To verify the remaining pressure rate sensor

B. Equipment and Materials

ITEM	DESIGNATION
A.	Pump - Vacuum

Referenced Procedure
- 24-41-00, P. Block 301 AC External Power Control

C. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.

(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Make sure that this circuit breaker is closed:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(4)Verification of the remaining pressure rate sensor
(a)Do the test to make sure that the remaining pressure rate sensor in the control unit 24MQ operates correctly.
(b)Simulate a rapid decompression of the cabin pressure with a PUMP - VACUUM.

NOTE : If LED CHAN 1 is on, examine RH pressure sensor hole.
If LED CHAN 2 is on, examine LH pressure sensor hole.

ACTION	RESULT
1. On the CKPT DOOR CONT Panel 20VU: - put the vaccuum pump in the applicable pressure sensor hole and operate it. - remove the vacuum pump from the pressure sensor.	On the Cockpit Door: - you can hear a clacking noise from the solenoids of the electrical release strikes. - the electrical strike-release units operate automatically to lock the cockpit door.

(5)Close-Up
(a)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).
(b)Make certain that work area is clean of tools and miscellaneous items of equipment.

**ON A/C ALL

COCKPIT DOOR LOCKING SYSTEM - DEACTIVATION/REACTIVATION (FAA ONLY)

Ref. MMEL 52-50-02-1) - b) (Lock Function) (FAA only)
Ref. MMEL 52-50-02-4) (Buzzer) (FAA only)
Ref. MMEL 52-50-02-5) (Keypad) (FAA only)

1. Deactivation of the Keypad

NOTE : Deactivation of the keypad fulfills all requirements (Lock Function, Buzzer and Keypad).

A. Equipment and Materials

ITEM	DESIGNATION
A.	Blanking Caps
B.	Circuit Breaker Safety Clips and Tags
C.	Tie-Wraps

Referenced Procedure

- 24-41-00, P. Block 301	AC External Power Control

B. Procedure

(1)Job Set-Up

(a)Make sure that the access to the cockpit is available.

(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).

(c)Make certain that electronics racks ventilation is correct.

(d)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(2)Deactivation of the Keypad on the Control Unit 24MQ (Ref. Fig. 901).

CAUTION : MAKE SURE THAT THE COCKPIT DOOR DOES NOT CLOSE DURING OR AFTER THE DEACTIVATION PROCEDURE, WITH NO PERSON IN THE COCKPIT.

NOTE : If the cockpit door closes during the deactivation procedure and no person is in the flight compartment, de-energize the aircraft electrical circuits to open the door.

(a)Hold the front face of the control unit (1) to support it and loosen the captive screws (2).

(b)Carefully remove the control unit (1) until you get access to the electrical connector (4).

(c)Disconnect the electrical connector (4) from the receptacle (3).

(d)Put blanking caps on the disconnected electrical connector (4) and on the receptacle (3).

(e)Safety the electrical connector (4) with tie-wraps, to the adjacent fuselage structure.

(f)Carefully install the control unit (1) and tighten the captive screws (2).

(g)Put a warning notice on the overhead panel 20VU to tell persons that the control unit (1) is deactivated.

(5)Close-Up

(a)Remove the safety clip and tag and close the following circuit breaker: 1MQ.

(b)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).

(c)Make certain that work area is clean of tools and miscellaneous items of equipment.
(d)Make an entry in the aircraft technical log that the lock function of the cockpit door lock system is deactivated.

**ON A/C ALL

2. Reactivation of the Keypad

A. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clip

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-51-00, P. Block 501	Fixed Interior Doors in Passenger Compartment
- TSM 52-51-00	Cockpit Door Lock

B. Procedure
(1)Job Set-Up
(a)Make sure that the access to the cockpit is available.
(b)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(3)Reactivation (Ref. Fig. 901)

CAUTION : MAKE SURE THAT THE COCKPIT DOOR DOES NOT CLOSE DURING OR AFTER THE DEACTIVATION PROCEDURE, WITH NO PERSON IN THE COCKPIT.

(a)Hold the front face of the control unit (1) and loosen the captive screws (2).
(b)Carefully remove the control unit (1) until you get access to the electrical connector (4).
(c)Cut, remove and discard the tie-wraps to release the temporarily attached connector (4) from the adjacent fuselage structure.
(d)Remove the blanking caps from the electrical connector (4) and the receptacle (3).
(e)Make sure that the electrical connector (4) and the receptacle (3) are clean and in the correct condition.

(f)Connect the electrical connector (4) to the receptacle (3).
(g)Carefully install the control unit (1) and attach it with the captive screws (2).
(h)Do the trouble shooting procedure (Ref. TSM 52-51-00, P. Block 101) to eliminate the malfunction of the CDLS.

(4)Tests
(a)Remove the safety clip and tag and close the following circuit breaker:
1MQ
(b)Do the operational test of the CDLS to make sure that it operates satisfactorily (Ref. 52-51-00, P. Block 501).

(4)Close-Up
(a)Remove the warning notice from the overhead panel 20VU.
(b)De-energize aircraft electrical network and remove electrical ground power unit (Ref. 24-41-00, P. Block 301).
(c)Make certain that work area is clean of tools and miscellaneous items of equipment.
(d)Remove the deactivation entry from the aircraft technical log.

R **ON A/C ALL

R

FLIGHT COMPARTMENT DOOR - REMOVAL/INSTALLATION

1. Reason for the Job

A. Removal and Installation of the Flight Compartment Door and related Components:
(1)Flight Compartment Door (referred to as Cockpit Door).
(2)Fixed partition.
(3)RH Door Post.
(4)LH Door Post.

**ON A/C ALL

R

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clip
B. Material No. 08-001	Bonding and Adhesive Compounds (Ref. 20-31-00)
C. Material No. 11-003	Cleaning Agents (Ref. 20-31-00)
D. Material No. 19-003	Lint-Free Cloth (Ref. 20-31-00)
E. Material No. 19-010	Lockwire (Ref. 20-31-00)
Referenced Procedures	
- 24-41-00, P. Block 301	A/C External Power Control
- 25-13-11, P. Block 401	Ceiling Panels - Flight Compartment
- 25-23-13, P. Block 401	Ceiling Panels Utility Area
- 33-21-13, P. Block 201	Cockpit Door Limit Switch
- 52-51-00, P. Block 501	Fixed Interior Doors
- 52-51-11, P. Block 501	Flight Compartment Door
- 52-51-12, P. Block 401	Electrical Release Strike
- 52-51-16, P. Block 401	Key Pad
- 52-51-18, P. Block 401	Circuit Breaker Box

3. Procedure

A. Job Set-Up
(1)Make sure that access to the cockpit is available.
(2)Connect the electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(3)Make certain the the electronics rack ventilation is correct.
(4)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

(5)Remove the ceiling panels installed around the partition of the cockpit door to get access to the attachment elements (Ref. 25-13-11, P. Block 401 and 25-23-13, P. Block 401).

B. Removal
(1)Remove the cockpit door (6) as follows:

**ON A/C ALL

R

(Ref. Fig. 401)

**ON A/C ALL

(Ref. Fig. 402)

**ON A/C ALL

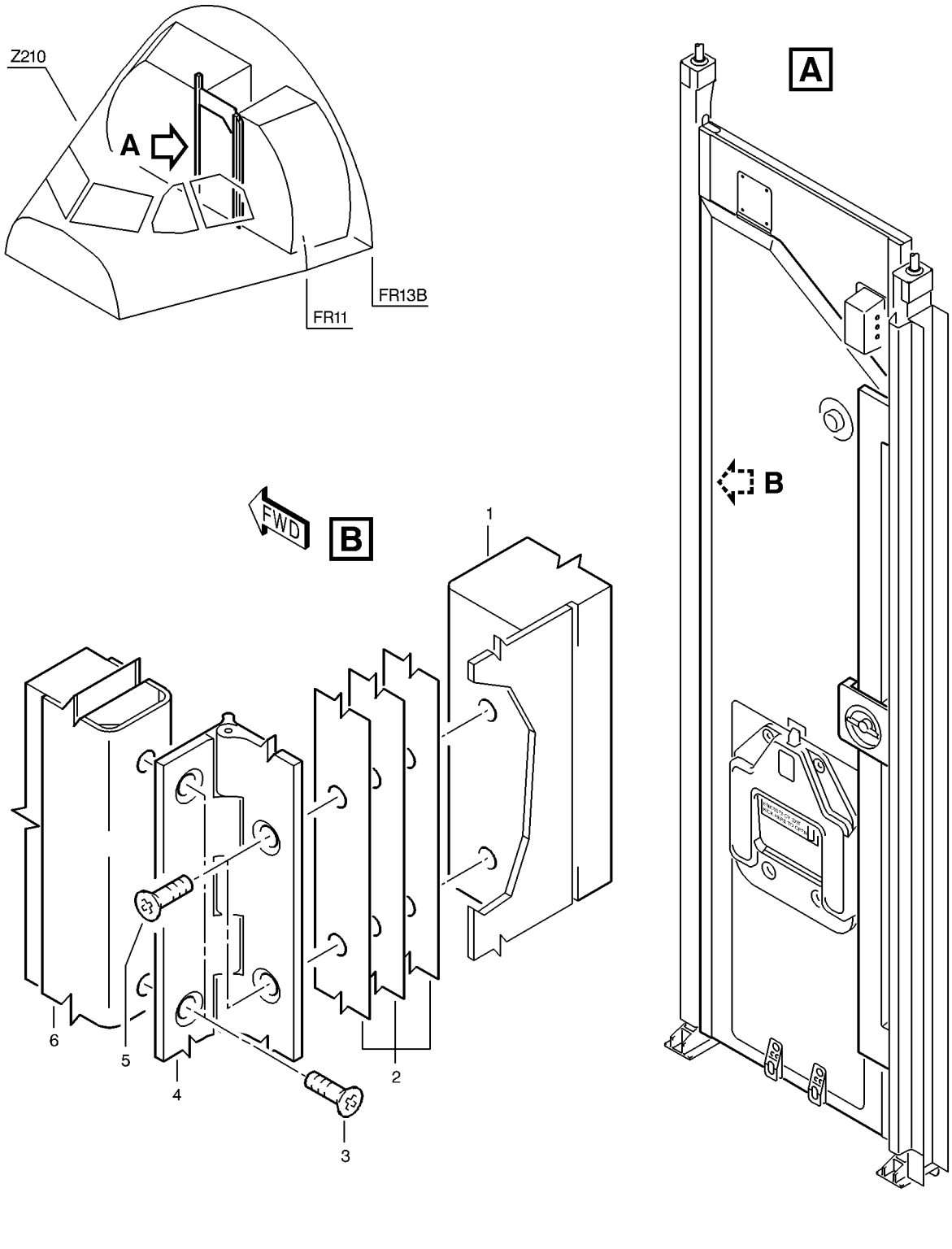
(a)Remove the screws (5) from the piano hinge (4) and disconnect the cockpit door (6) and the shim profiles (2) from the RH door post (1).
(b)If necessary, remove the screws (3) and the piano hinge (4) from the cockpit door (6).
(c)If necessary, remove the spy hole (7) as follows:
1 Prevent damage to the component interface and the adjacent area.
2 Remove the knurled sleeve nut (10) and the spacer (9) from the spy hole (7).
3 Remove the spy hole (7) from the milled disk (8) of the cockpit door (6).
(2)Remove the fixed partition (12) as follows:

**ON A/C ALL

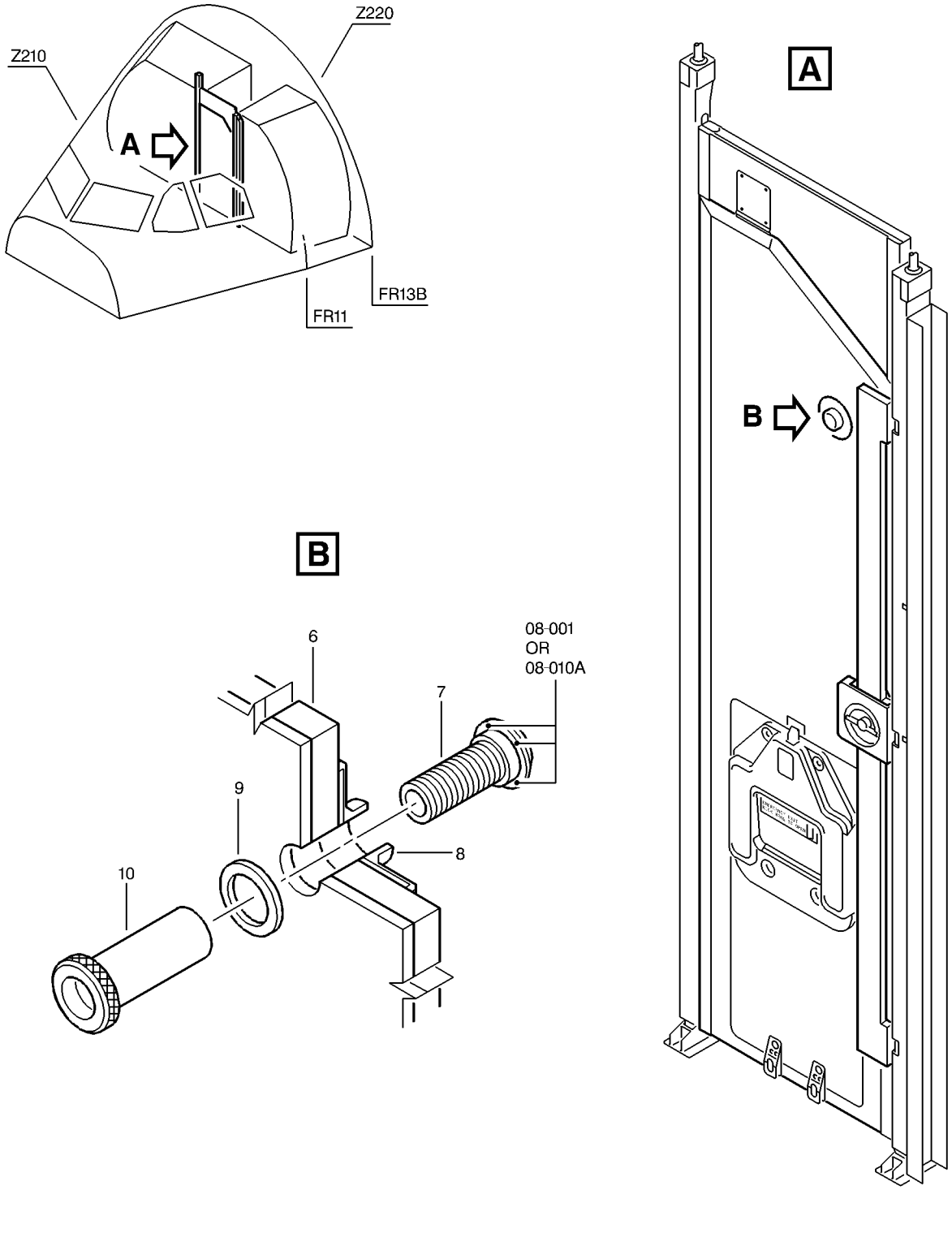
R

(Ref. Fig. 403)

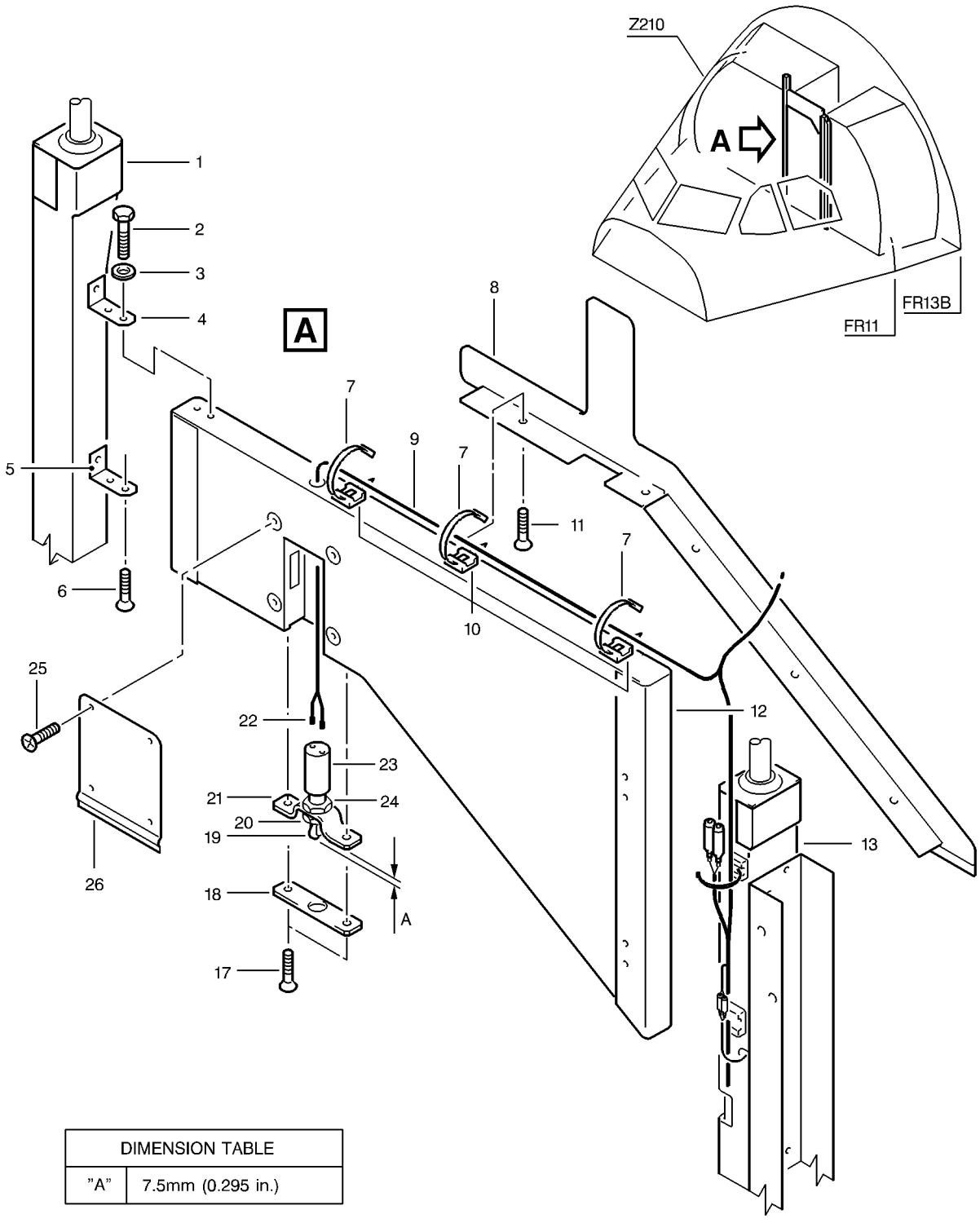
**ON A/C ALL



Cockpit Door
Figure 401



Spy Hole on Cockpit Door
Figure 402



DIMENSION TABLE	
"A"	7.5mm (0.295 in.)

BM6 52 51 11 4 BAX0 00

Fixed Partition
Figure 403

R

(a)Remove the circuit breaker box 60MQ from the fixed partition (12) (Ref. 52-51-18, P. Block 401).
(b)Remove the limit switch 825LG (23) together with the switch bracket (21) as follows:
1 Remove the screws (25) and the cover (26) from the fixed partition (12).
2 Remove the screws (17) and disconnect the switch bracket (20) together with the cover sheet (18) from the fixed partition (12).
3 Disconnect the cables (22) of the wire harness (9) from the limit switch (23).

NOTE : Identify the cable connection for easier installation.

(c)Disassemble the wire harness (9) from the fixed partition (12) as follows:
1 Cut and remove the cable ties (7) from the cable brackets (10).
2 Remove the wire harness (9) from the fixed partition (12).
(d)Support the fixed partition (12) and remove the screw (6) from the lower door post angle (5).

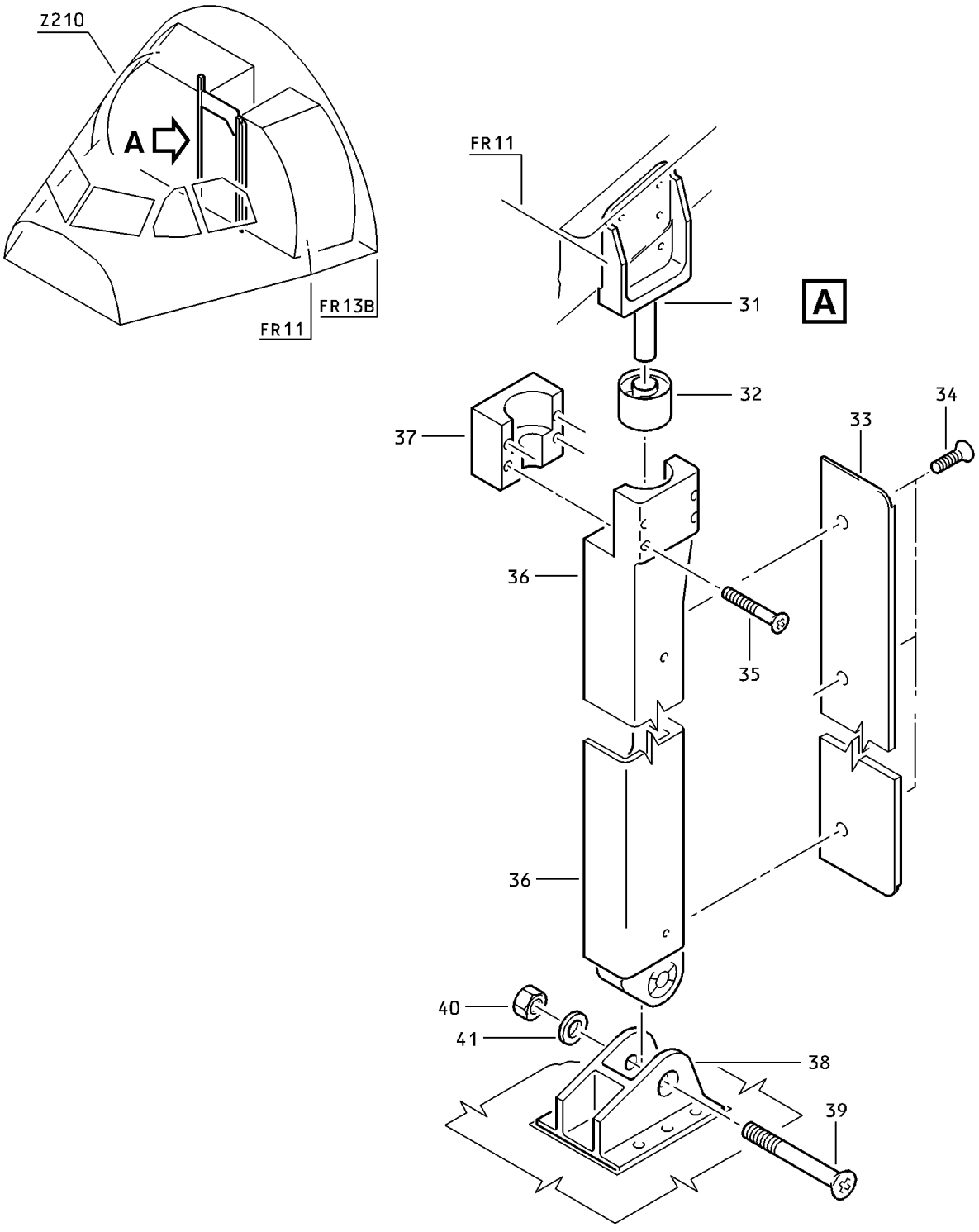
(e)Remove the fixed partition (12) from the door post assemblies (1) and (13).
(f)If necessary, remove the screws (11) and the upper gap cover (8) from the fixed partition (12).
(3)Remove the RH door post (36) as follows:

**ON A/C ALL

(Ref. Fig. 404)

**ON A/C ALL

(a)Remove the cockpit door (refer to para B.(1)) and the fixed partition (refer to para B.(2)).
(b)Remove the screws (35) and disconnect the shock absorber block (37) from the RH door post (36).
(c)Remove the nut (40), the washer (41) and the bolt (39) from the lower fuselage bracket (38).
(d)Remove the RH door post (36) from the lower fuselage bracket (38) and the shock absorber (32) mounted on the upper fuselage fitting (31).
(e)If necessary, remove the shock absorber (32) from the upper fuselage fitting (31).
(f)If necessary, remove the screws (34) and the RH gap cover (33) from



BM6 52 51 11 4 BCMO 00

RH Door Post
Figure 404

the RH door post (36).

(4)Remove the LH door post (51) as follows:

**ON A/C ALL

R

(Ref. Fig. 405)

**ON A/C ALL

R

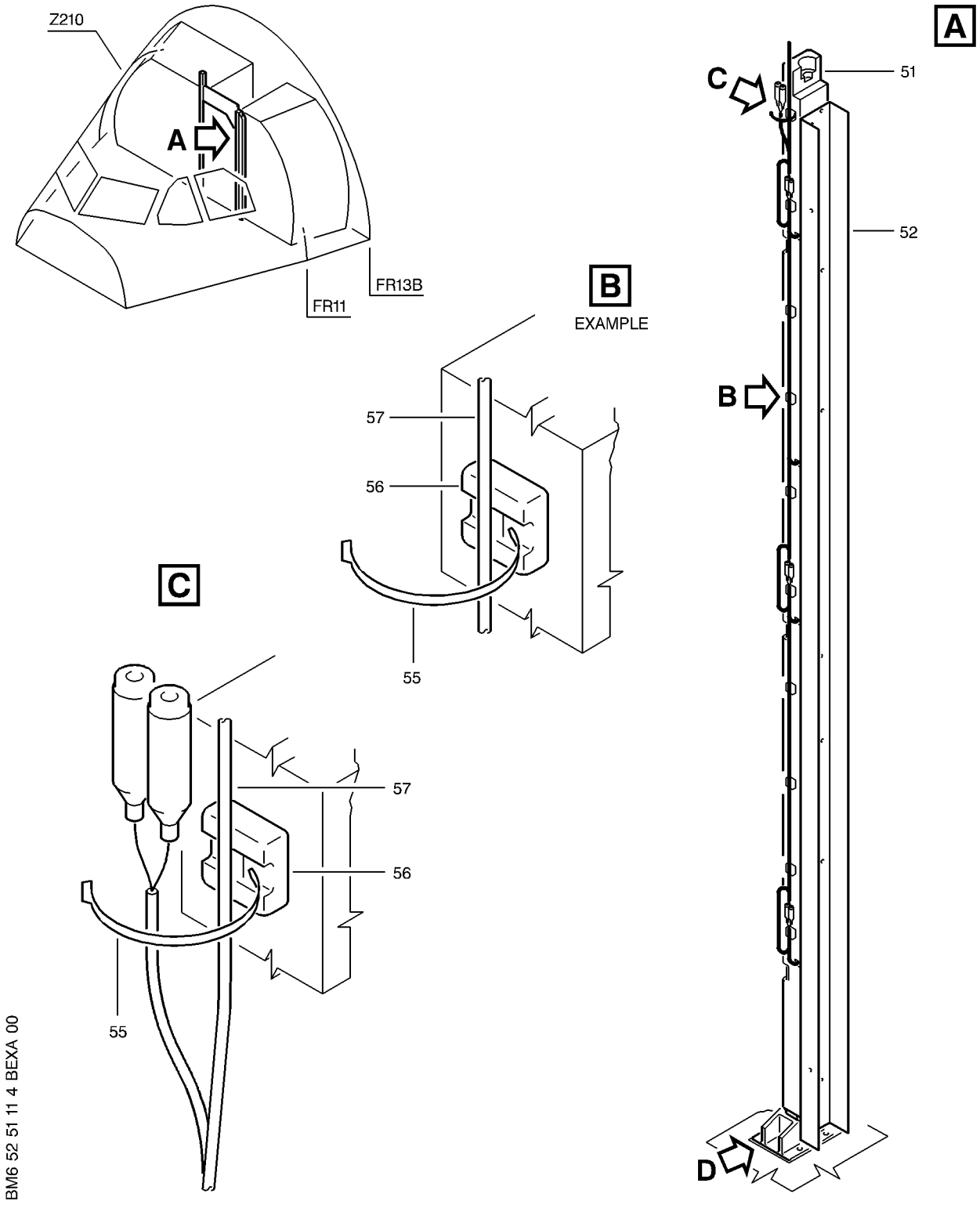
(a)Remove the fixed partition (refer to para. B.(2)).
(b)Remove the key pad and the key pad bracket (Ref. 52-51-16, P. Block 401).
(c)Remove the wire harness (57) from the LH door post (51) as follows:
1 Remove the screws (53) and the cockpit cover (54) from the door pillar (52).
2 Cut and remove the cable ties (55) from the cable brackets (56).
3 Disconnect the wire harness (57) from the connectors of the electrical release strikes (Ref. 52-51-12, P. Block 401).
4 Remove the wire harness (57) from the LH door post (51).
(d)Remove the screws (73) and disconnect the shock absorber bracket (63) from the LH door post (51).
(e)Remove the nut (67), the washer (66) and the bolt (69) from the lower fuselage bracket (68).
(f)Remove the caps (70), the screws (71) and the washers (72) to disconnect the LH door post (51) and the door pillar (52).
(g)Remove the LH door post (51) from the lower fuselage bracket (68) and the shock absorber (62) mounted on the upper fuselage fitting (61).
(h)If necessary, remove the shock absorber (62) from the upper fuselage fitting (61).
(j)If necessary, remove the screws (65) and LH gap cover (64) from the LH door post (51).
(k)If necessary, remove the electrical release strikes (Ref. 52-51-12, P. Block 401).

**ON A/C ALL

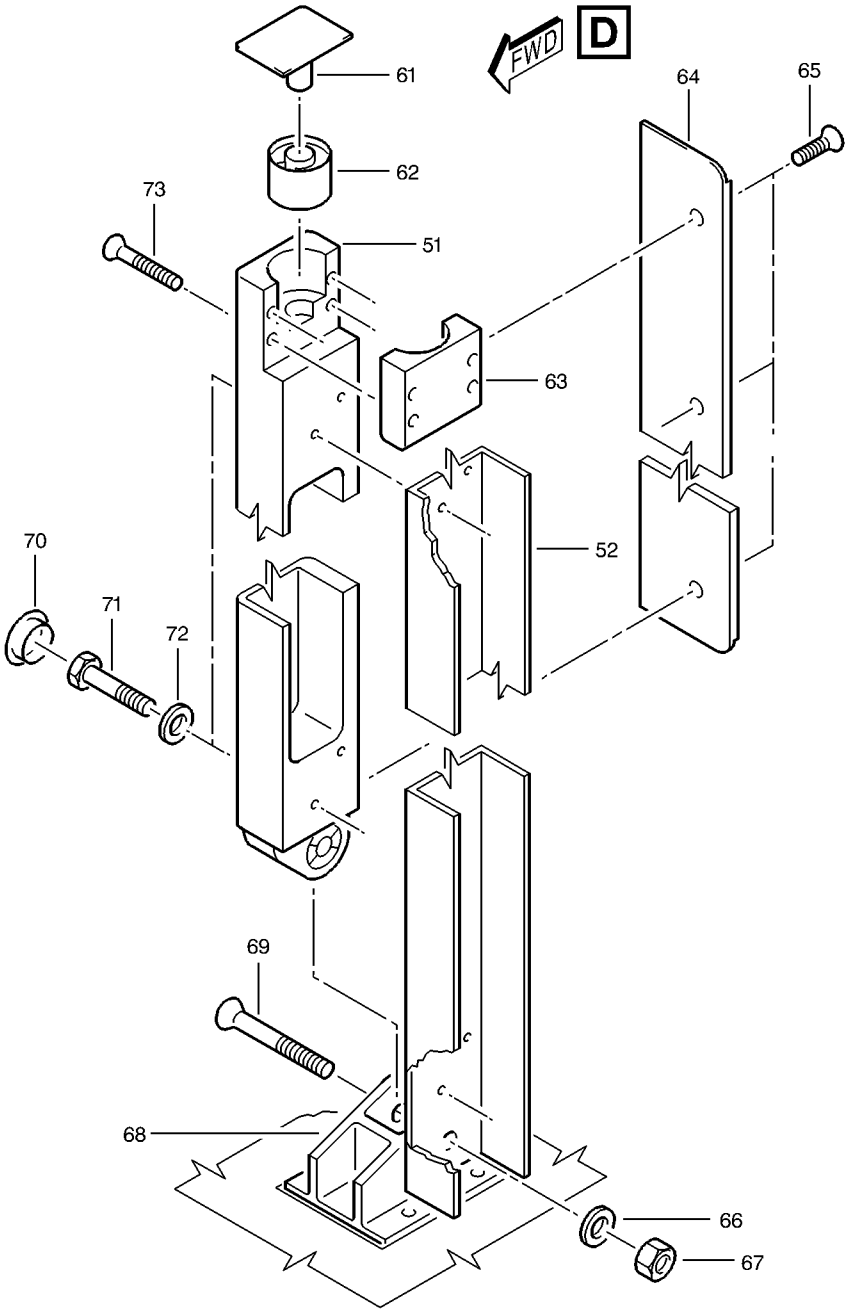
R

C. Installation

(1)Install the cockpit door (6) as follows (Ref. Fig. , 402):
(a)Make sure that the component interface and the adjacent area is clean and clear and in the correct condition.
(b)If removed, position the piano hinge (4) on the cockpit door (6)



LH Door Post (Sheet 1 of 2)
Figure 405



BM6 52 51 11 4 BEXM 00

LH Door Post (Sheet 2 of 2)
Figure 405

and attach it with the screws (3).

(c)If removed, install the spy hole (7) as follows:

WARNING : USE SOLVENTS/CLEANING AGENTS, SEALANTS AND OTHER SPECIAL MATERIALS ONLY WITH A GOOD FLOW OF AIR THROUGH THE WORK AREA. THESE MATERIALS ARE POISONOUS AND FLAMMABLE AND SKIN IRRITANTS.
OBEY THE MANUFACTURERS INSTRUCTIONS.
PUT ON PROTECTIVE CLOTHING.
DO NOT GET THEM IN YOUR MOUTH.
DO NOT SMOKE.
DO NOT BREATHE THE GAS.
GET MEDICAL HELP IF YOUR SKIN OR EYES BECOME IRRITATED.

WARNING : DO NOT GET THE COMPOUND ON YOUR SKIN.
IF YOU DO:
- REMOVE IT IMMEDIATELY WITH A CLEAN CLOTH
- WASH YOUR SKIN WITH SOAP AND RINSE WITH CLEAN WATER.

1 Clean the mating area of the milled disk (8) and the flange of the spy hole (7) with cleaning agents (Mat. No. 11-003) and lint-free cloth (Mat. No. 19-003).
2 Apply three points of bonding and adhesive compounds (Mat. No. 08-001) or (Mat. No. 08-010A) to the mating area of the milled disk (8) and the flange of the spy hole (7).
3 Put the spy hole (7) from the cabin side into the milled disk (8) of the cockpit door (6).
4 Install the spacer (9) and the knurled sleeve nut (10) on the spy hole (7).
5 Tighten the knurled sleeve nut (10).
6 Remove the unwanted bonding and adhesive compounds with lint-free cloth (Mat. No. 19-003).

(d)Position the shim profiles (2) and the cockpit door (6) on the RH door post (1) and attach the piano hinge (4) with the screws (5).

(e)Make sure that the gap between the LH door post (13) and the front face of the cockpit door (6) is correctly adjusted (Ref. 52-51-11, P. Block 501).

**ON A/C ALL

R

(2)Install the fixed partition (12) as follows (Ref. Fig. 403):

(a)Make sure that the component interface and the adjacent area is clean and clear and in the correct condition.

(b)If removed, position the upper gap cover (8) on the fixed partition (12) and attach it with the screws (11).

(c)Position the fixed partition (12) between the RH door post (1) and the LH door post (13).

(d)Install the screw (2) with the washer (3) to attach the fixed partition (12) on the upper door post angle (4).

(e)Install the screw (6) to attach the fixed partition (12) on the lower door post angle (5).
(f)Install the circuit breaker box 60MQ on the fixed partition (12) (Ref. 52-51-18, P. Block 401).
(g)Measure the distance "A" between the roller (19) of the limit switch (23) and the surface of the switch bracket (21).

NOTE : The distance "A" must be 7.5 mm (0.295 in.).

(h)If required, adjust the distance "A" as follows:
1 Cut and remove the lockwire from the locknut (20) and the adjustment nut (24).
2 Loosen the locknut (20).
3 Turn the adjustment nut (24) until the distance "A" is correct.
4 Tighten the locknut (20) and safety it with the lockwire (Material No. 19-010) on the adjustment nut (24).
(j)Install the wire harness (9) on the fixed partition (12) as follows:
1 Position the wire harness (9) to the cable brackets (10) and insert it into the slot of the limit switch.
2 Attach the wire harness (9) with the new cable ties (7) on the cable brackets (10).
(k)Install the limit switch (23) together with the switch bracket (21) on the fixed partition (12) as follows:
1 Connect the cables (22) of the wire harness (9) on the limit switch (23).

NOTE : Install the cable 3321-2799 to the limit switch connector 1 and the cable 3321-2794 to the limit switch connector 2.

2 Position the switch bracket (21) together with the cover sheet (18) on the fixed partition (12) and attach it with the screws (17).
3 Position the cover (26) on the fixed partition (12) and attach it with the screws (25).

**ON A/C ALL

(3)Install the RH door post (36) as follows (Ref. Fig. 404):
(a)Make sure that the component interface and the adjacent area is clean and clear and in the correct condition.
(b)If removed, position the shock absorber (32) on the upper fuselage fitting (31).

NOTE : Make sure that the cut-out of the shock absorber (32) is in the flight direction.

(c)If removed, install the RH gap cover (33) with the screws (34) on the RH door post (36).

(d)Position the RH door post (36) into the lower fuselage bracket (38) and make sure that its upper end engages the shock absorber (32).
(e)Position the shock absorber block (37) on the RH door post (36) and attach it with the screws (35).
(f)Install the bolt (39), the washer (41) and the nut (40) to attach the RH door post (36) on the lower fuselage bracket (38).
(g)Install the cockpit door (refer to para. B.(1)) and the fixed partition (refer to para. B.(2)).

**ON A/C ALL

R

(4)Install the LH door post (51) as follows (Ref. Fig. 405):
(a)Make sure that the component interface and the adjacent area is clean and clear and in the correct condition.
(b)If removed, install the LH gap cover (64) with the screws (65) on the LH door post (51).
(c)If removed, install the electrical release strikes (Ref. 52-51-12, P. Block 401).
(d)If removed, position the shock absorber (62) on the upper fuselage fitting (61).

NOTE : Make sure that the cut-out of the shock absorber (62) is in the flight direction.

(e)Position the LH door post (51) into the lower fuselage bracket (68) and make sure that its upper end engages the shock absorber (62).
(f)Attach the LH door post (51) on the door pillar (52) with the screws (71) and the washers (72) and install the caps (70).
(g)Position the shock absorber block (63) on the LH door post (51) and attach it with the screws (73).
(h)Install the bolt (69), the washer (66) and the nut (67) to attach the LH door post (51) on the lower fuselage bracket (68).
(j)Install the wire harness (57) on the LH door post (51) as follows:
1 Position the wire harness (57) to the related cable brackets (56) and attach it with the new cable ties (55).
2 Connect the wire harness (57) with the connectors of the electrical release strikes (Ref. 52-51-12, P. Block 401).
3 Position the cockpit cover (54) on the door pillar (52) and attach it with the screws (53).
(k)Install the key pad and the key pad bracket (Ref. 52-51-16, P. Block 401).
(l)Install the fixed partition (refer to para. B.(2)).

**ON A/C ALL

D. Adjustment/Test
(1)Make certain that the safety clip and tag are removed and the following circuit breaker is closed: 1MQ.
(2)Make sure that the cockpit door and the related latch mechanism are correctly adjusted (Ref. 52-51-11, P. Block 501).
(3)Make sure that the limit switch 825LG operates correctly (Ref. 33-21-13, P. Block 201).
(4)Make sure that the cockpit door lock system operates satisfactorily (Ref. 52-51-00, P. Block 501).

E. Close Up
(1)Make sure that the work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install the removed ceiling panels around the partition of the cockpit door (Ref. 25-13-11, P. Block 401 and 25-23-11, P. Block 401).
(3)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, p. Block 301).

R **ON A/C ALL

FLIGHT COMPARTMENT DOOR - ADJUSTMENT/TEST

1. Reason for the Job

To make sure that the cockpit door and the door lock are correctly adjusted.

2. Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-51-00, P. Block 501	Fixed Interior Door in Passenger Compartment
- 52-51-21, P. Block 401	Latch Mechanism

**ON A/C ALL

3. Procedure

**ON A/C ALL

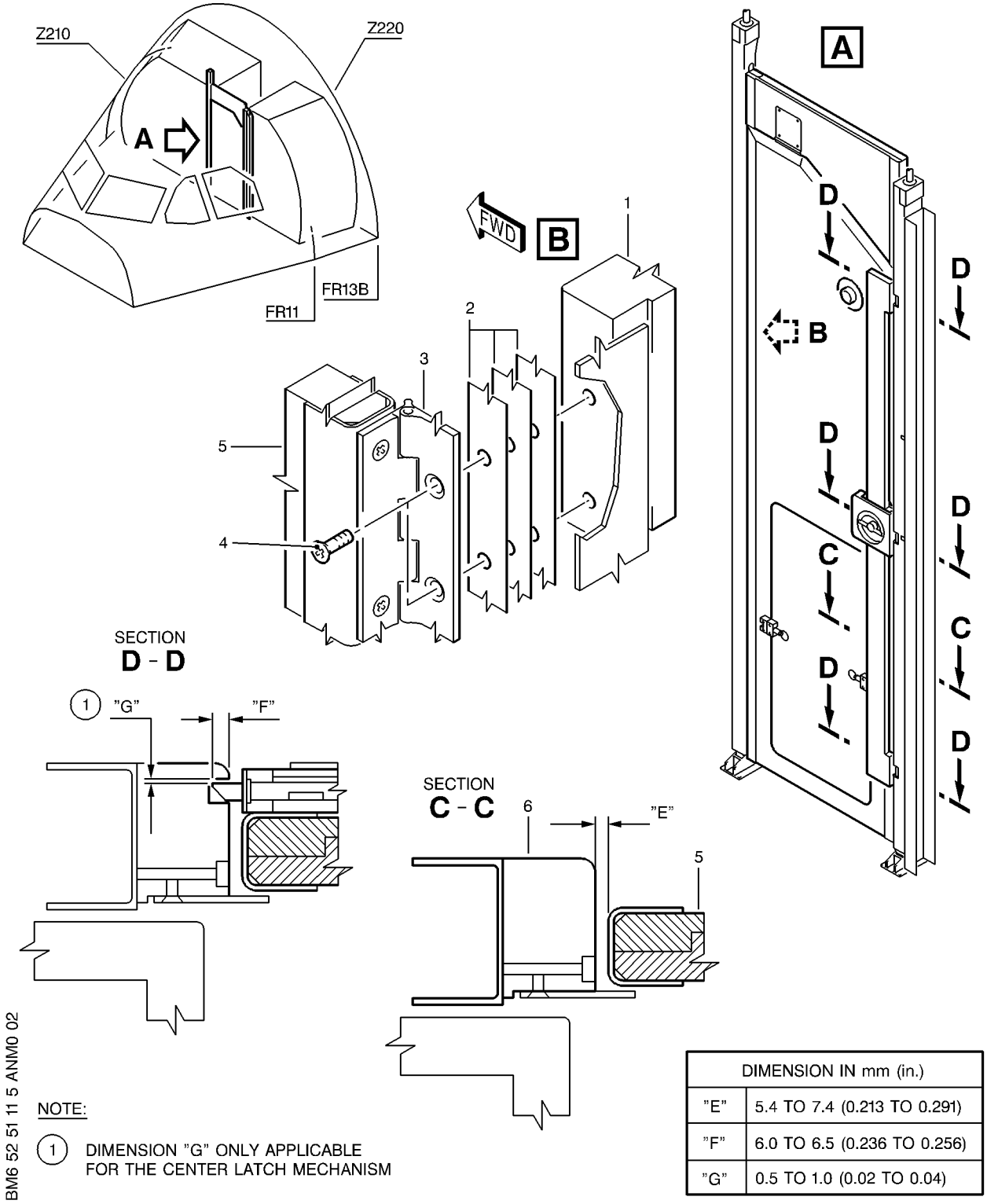
A. Job Set-Up
(1)Make sure that the flight compartment door is open.
(2)Connect electrical ground power unit and energize aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Make certain that the following circuit breaker is closed.

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT/DOOR	1MQ	321/P85

B. Adjustment of Door Gap (Ref. Fig. 501)

**ON A/C ALL

(1)Measure the distance 'E' between the door and the door post, which must be between 5.4 mm (0.213 in.) and 7.4 mm (0.291 in.).



DIMENSION IN mm (in.)	
"E"	5.4 TO 7.4 (0.213 TO 0.291)
"F"	6.0 TO 6.5 (0.236 TO 0.256)
"G"	0.5 TO 1.0 (0.02 TO 0.04)

BM6 52 51 11 5 ANM0 02

Door and Lock Adjustment
Figure 501

R

(2)If the distance 'E' is not within limit, remove or add the quantity of the shims (2) as follows:
(a)Remove the screws (4) from the door post (1) and move the door (5) to get access to the shims (2).
(b)Remove or add shims (2) to give the correct distance 'E'.
(c)Put the piano hinge (3) and the door (5) in position on the door post (1) and install the screws (4).

C. Adjustment of the Door Lock (Ref. Fig. 501)

**ON A/C ALL

(1)Close the door and make sure that the door latch tenons engage the adjacent latches.
(2)Make sure that the distance 'F' is between 6.0 mm (0.236 in.) and 6.5 mm (0.256 in.).
(3)If the distance 'F' is not correct, move the latch mechanisms until the distance 'F' is correct (Ref. 52-51-21, P. Block 401).
(4)Measure the distance 'G' which must be between 0.5 mm (0.02 in.) and 1.0 mm (0.04 in.).
(5)If the distance 'G' is not correct, remove or add the quantity of the washers between the center latch mechanism and the door (Ref.52-51-21, P. Block 401).

NOTE : Make sure that the top and bottom latch tenons are already in closed position before the center latch tenon engages.

D. Test
(1)Remove the safety clip and tag and close the following circuit breaker: 1MQ.
(2)Do the operational test of the CLDS to make sure that the cockpit door opens and closes correctly (Ref. 52-51-00, P. Block 501).

E. Close-Up
(1)Make sure that working area is clean and clear of tools and miscellaneous items of equipment.

**ON A/C ALL

R

1. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clip
Referenced Procedure	
- 24-41-00, P. Block 301	AC External Power Control
- 52-51-00, P. Block 501	Fixed Interior Door in Passenger Compartment
- 52-51-11, P. Block 401	Flight Compartment Door
R - 52-51-11, P. Block 501	Flight Compartment Door
R ESPM 204825	
R AWM 52-51-02	

2. Procedure

A. Job Set-Up
(1)Connect the electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronic racks ventilation is correct.
(3)Make sure that the access to the cockpit is available.
(4)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

B. Removal

**ON A/C ALL

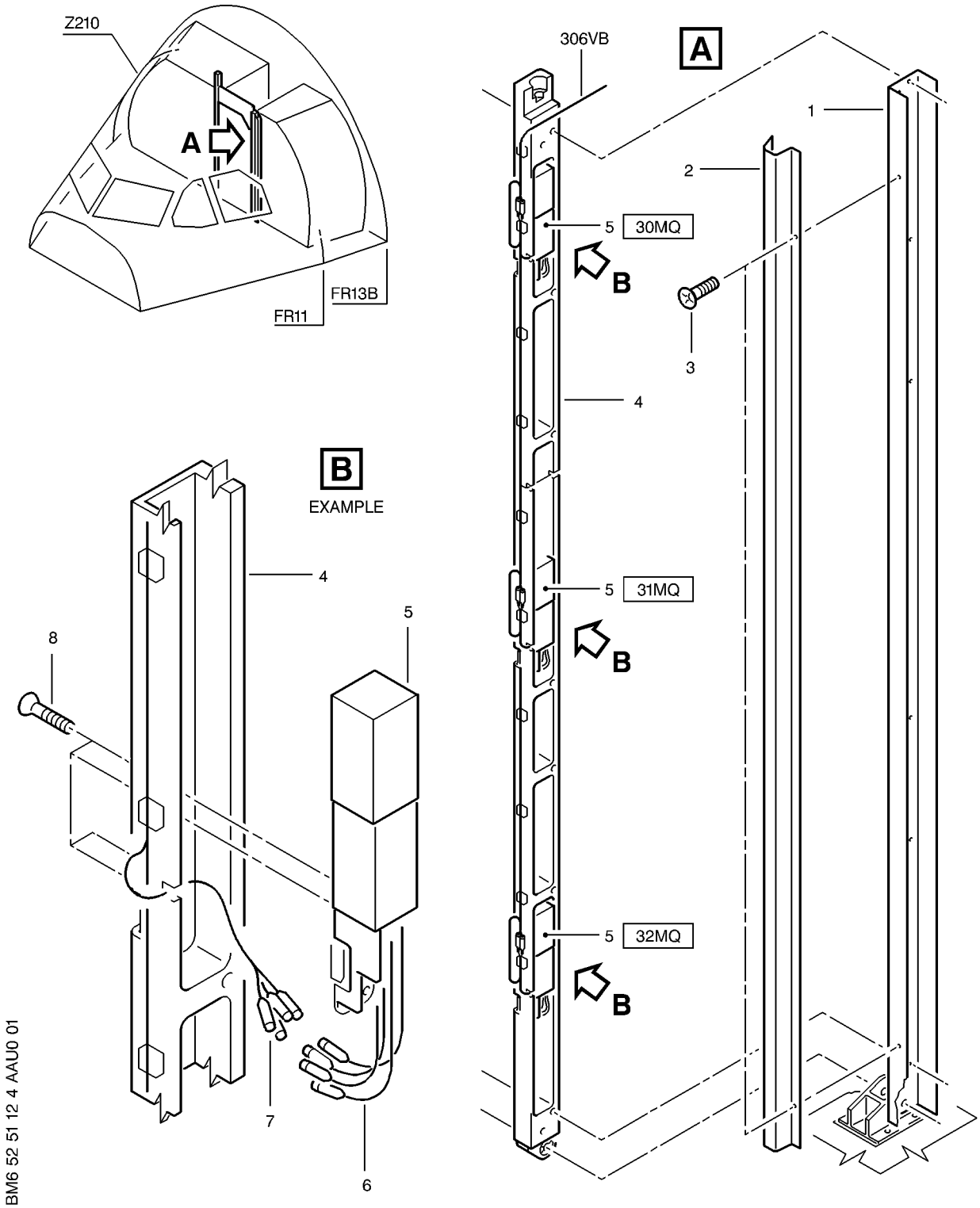
R

(Ref. Fig. 401)

**ON A/C ALL

R

(1)Remove the screws (3) to disconnect the cover (2) from the door pillar (1).



R Electric - Release Strike
Figure 401

R CAUTION : MAKE MATCH MARKS ON ALL ELECTRICAL WIRES BEFORE YOU DISCONNECT
R THEM. INCORRECT CONNECTION OF WIRES WILL CAUSE DAMAGE TO
R EQUIPMENT.

R (2)Disconnect the electrical connector (6) of the electrical release strike
R (5) from the electrical connectors (7) of the wire harness 306VB
R (Ref. ESPM 204825) and (Ref. AWM 52-51-02).
(3)Install the blanking caps on the disconnected electrical connectors.
(4)Remove the partition and the LH door post (4) from the door pillar (1)
(Ref. 52-51-11, P. Block 401).
(5)Remove the screws (8) and the applicable electrical release strike (5)
from the LH door post (4).

C. Installation
(1)Make sure that the component interface and/or adjacent area is clean
R and in the correct condition.
(2)Position the electrical release strike (5) into the LH door post (4)
and attach it with the screws (8).
(3)Install the LH door post (4) and the partition (Ref. 52-51-11,
P. Block 401).
(4)Remove the blanking caps from the electrical connectors and make sure
that they are in their correct condition.

R CAUTION : REFER TO THE MATCH MARKS MADE DURING THE REMOVAL WHEN YOU CONNECT
R THE ELECTRICAL WIRES. INCORRECT CONNECTION OF THE WIRES WILL
R CAUSE DAMAGE TO EQUIPMENT.

R (5)Connect the electrical connector (6) of the electrical release strike
R (5) with the electrical connectors (7) of the wire harness 306VB
R (Ref. ESPM 204825) and (Ref.AWM 52-51-02).
(6)Position the cover (2) on the door pillar (1) and attach it with the
screws (3).

**ON A/C ALL

R

D. Test

(1)Remove the safety clip and tag and close the circuit breaker: 1MQ.
R (2)Make sure that the cockpit door and the door latch mechanism are
R correctly adjusted (Ref. 52-51-11, P. Block 501).
R (3)Carry out an operational test of the cockpit door locking system to
make sure that the electrical release strikes operate satisfactorily
(Ref. 52-51-00, P. Block 501).

E. Close-Up
(1)Make certain that the working area is clean and clear of tools and mis-

cellaneous items of equipment.

(2) De-energize the aircraft electrical network and disconnect the electrical ground power unit (Ref. 24-41-00, P. Block 301).

**ON A/C ALL

BUZZER - COCKPIT DOOR LOCKING SYSTEM (23MQ) - REMOVAL/INSTALLATION

1. Reason for the Job
Self Explanatory.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker(s) Safety Clip(s)
Referenced Procedures	
- 24-42-00, P. Block 301	Ground Service Bus Control - Servicing
- 25-13-11, P. Block 401	Ceiling Panels - Removal/Installation
R - 52-51-00, P. Block 501	Fixed Interior Doors in Passenger
R	Compartment - Adjustment/Test

3. Procedure

**ON A/C ALL

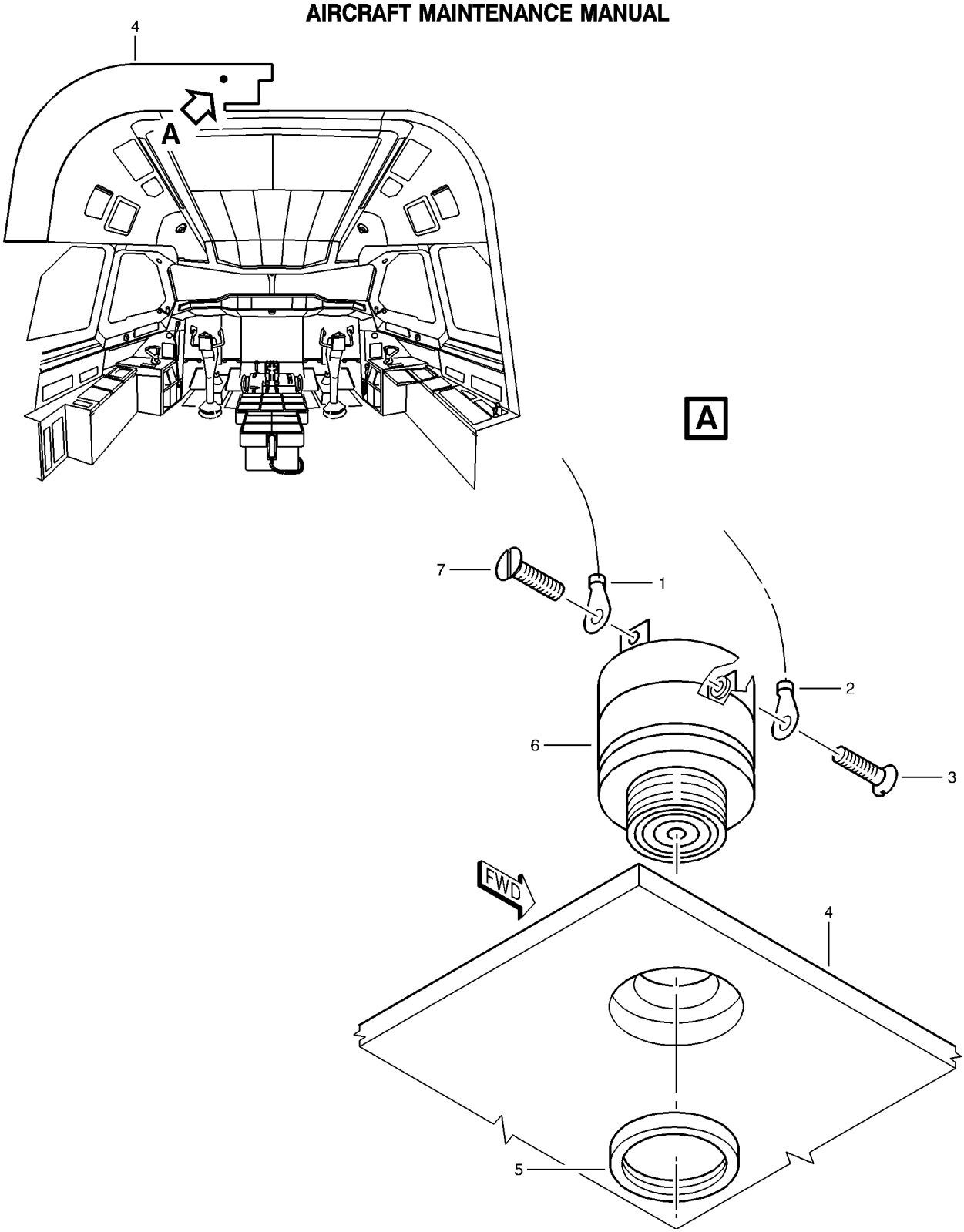
(Ref. Fig. 401)

**ON A/C ALL

A. Job Set-Up
(1)Energize the ground service network (Ref. 24-42-00, P. Block 301).
(2)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

B. Removal
(1)Remove the nut (5).
(2)Remove the ceiling panel (4) (Ref. 25-13-11, P. Block 401).
(3)Remove the screws (3) and (7).
(4)Disconnect the cable terminals (1) and (2).
(5)Remove the buzzer (6).



Buzzer of the Cockpit-Door Locking System
Figure 401

C. Installation
(1)Clean the component interface and/or the adjacent area.
(2)Do a visual inspection of the component interface and/or the adjacent area.
(3)Put the buzzer (6) in position on the ceiling panel (4).
(4)Connect the cable terminals (1) and (2) to the buzzer (6).
(5)Install the screws (3) and (7) and tighten them.
(6)Install the ceiling panel (4) (Ref. 25-13-11, P. Block 401).
(7)Install the nut (5) and tighten it.
(8)Remove the safety clip and tag and close the following circuit breaker: 1MQ.
R (9)Do an operational test of the routine access (Ref. 52-51-00, P. Block 501).

D. Close-Up
(1)Make sure that the work area is clean and clear of tool(s) and other items.
(2)Remove the ground support and maintenant equipment, the special and standard tools and all other items.
(3)De-energize the ground service network (Ref. 24-42-00, P. Block 301).

R **ON A/C ALL

CONTROL UNIT - COCKPIT DOOR LOCKING SYSTEM (24MQ) - REMOVAL/INSTALLATION

1. Reason for the Job
Self Explanatory.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker(s) Safety Clip(s)
B.	Blanking Cap(s)
Referenced Procedures	
- 24-42-00, P. Block 301	Ground Service Bus Control - Servicing
- 52-51-00, P. Block 501	Fixed Interior Doors In Passenger Compartment - Adjustment/Test

3. Procedure

**ON A/C ALL

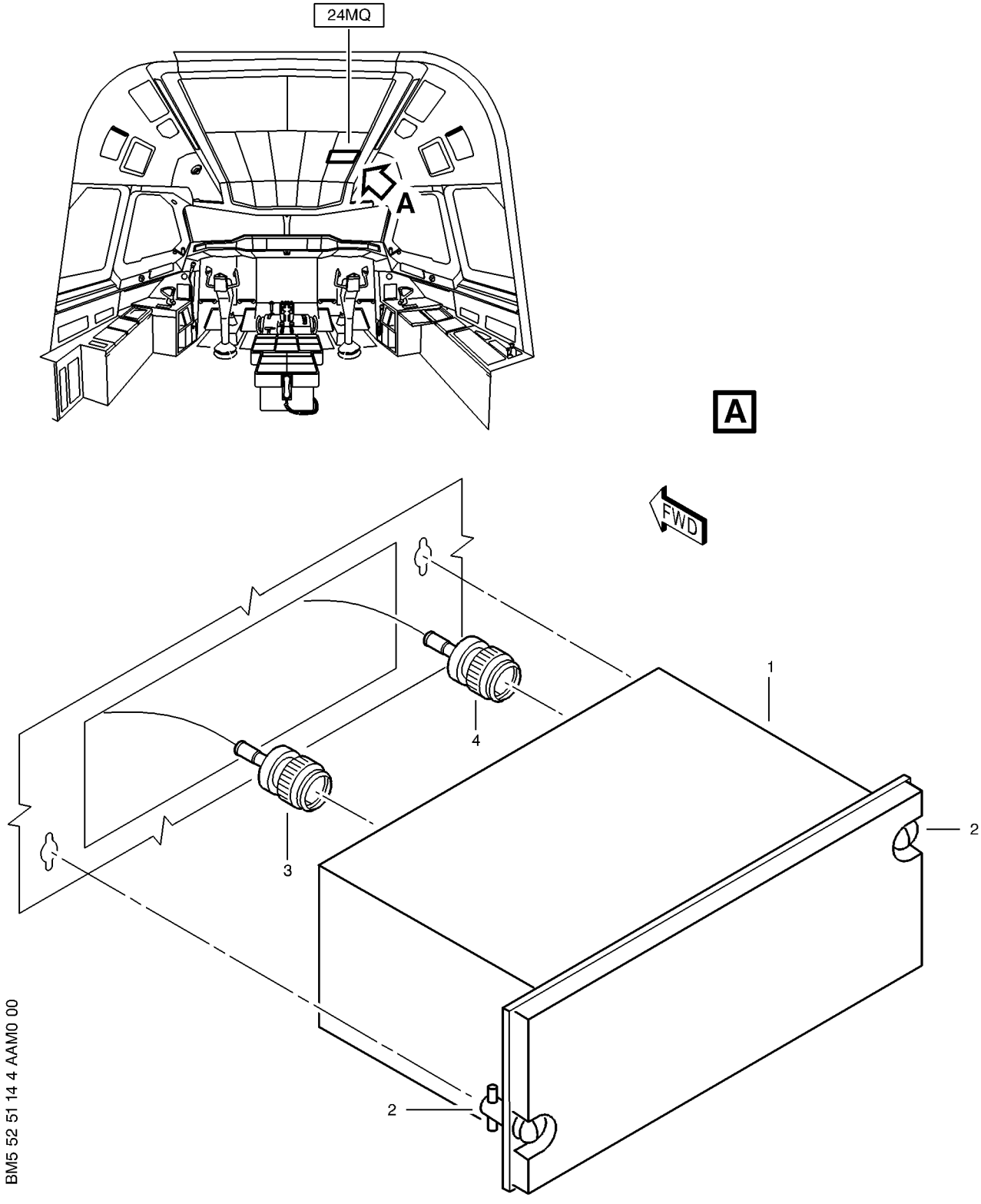
(Ref. Fig. 401)

**ON A/C ALL

A. Job Set-Up
(1)Energize the ground service network (Ref. 24-42-00, P. Block 301).
(2)Open, safety and tag the following circuit breaker:

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

**ON A/C ALL



Control Unit of the Cockpit-Door Locking System
Figure 401

B. Removal
(1)Hold the control unit (1) and loosen the captive screws (2).
CAUTION : BE CAREFUL DURING REMOVAL/INSTALLATION OF THE CONTROL UNIT. THE BONDING WIRES ARE SHORT AND DAMAGE CAN EASILY OCCUR TO THEM.
(2)Carefully remove the control unit (1) to get access to the electrical connectors (3) and (4).
(3)Disconnect the electrical connectors (3) and (4) and remove the control unit (1).
(4)Put blanking caps on the disconnected electrical connectors.

C. Installation
(1)Clean the component interface and/or the adjacent area.
(2)Do a visual inspection of the component interface and/or the adjacent area.
(3)Remove the blanking caps from the electrical connectors.
(4)Make sure that the electrical connectors are clean and in the correct condition.
CAUTION : BE CAREFUL DURING REMOVAL/INSTALLATION OF THE CONTROL UNIT. THE BONDING WIRES ARE SHORT AND DAMAGE CAN EASILY OCCUR TO THEM.
(5)Put the control unit (1) in position and connect the electrical connectors (3) and (4).
(6)Carefully install the control unit (1) and tighten the captive screws (2).
(7)Remove the safety clip and tag and close the following circuit breaker: 1MQ.
CAUTION : MAKE SURE THAT YOU PROGRAM THE CONTROL UNIT OF THE COCKPIT-DOOR LOCKING SYSTEM AFTER INSTALLATION. IF YOU DO NOT, ACCESS TO THE COCKPIT AREA WILL NOT BE POSSIBLE.
(8)Do an operational test of the Cockpit Door Lock System (CDLS), an operational test of routine access, and an operational test of the emergency access (Ref. 52-51-00, P. Block 501).

D. Close-Up
(1)Make sure that the work area is clean and clear of tool(s) and other items.
(2)Remove the ground support and maintenance equipment, the special and standard tools and all other items.
(3)De-energize the ground service network (Ref. 24-42-00, P. Block 301).

R **ON A/C ALL

KEYPAD - REMOVAL/INSTALLATION

1. Reason for the Job

Self explanatory.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clip
B.	Blanking Caps

Referenced Procedure
- 52-51-00, P. Block 501 Fixed Interior Doors in Passenger Compartment

3. Procedure

A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

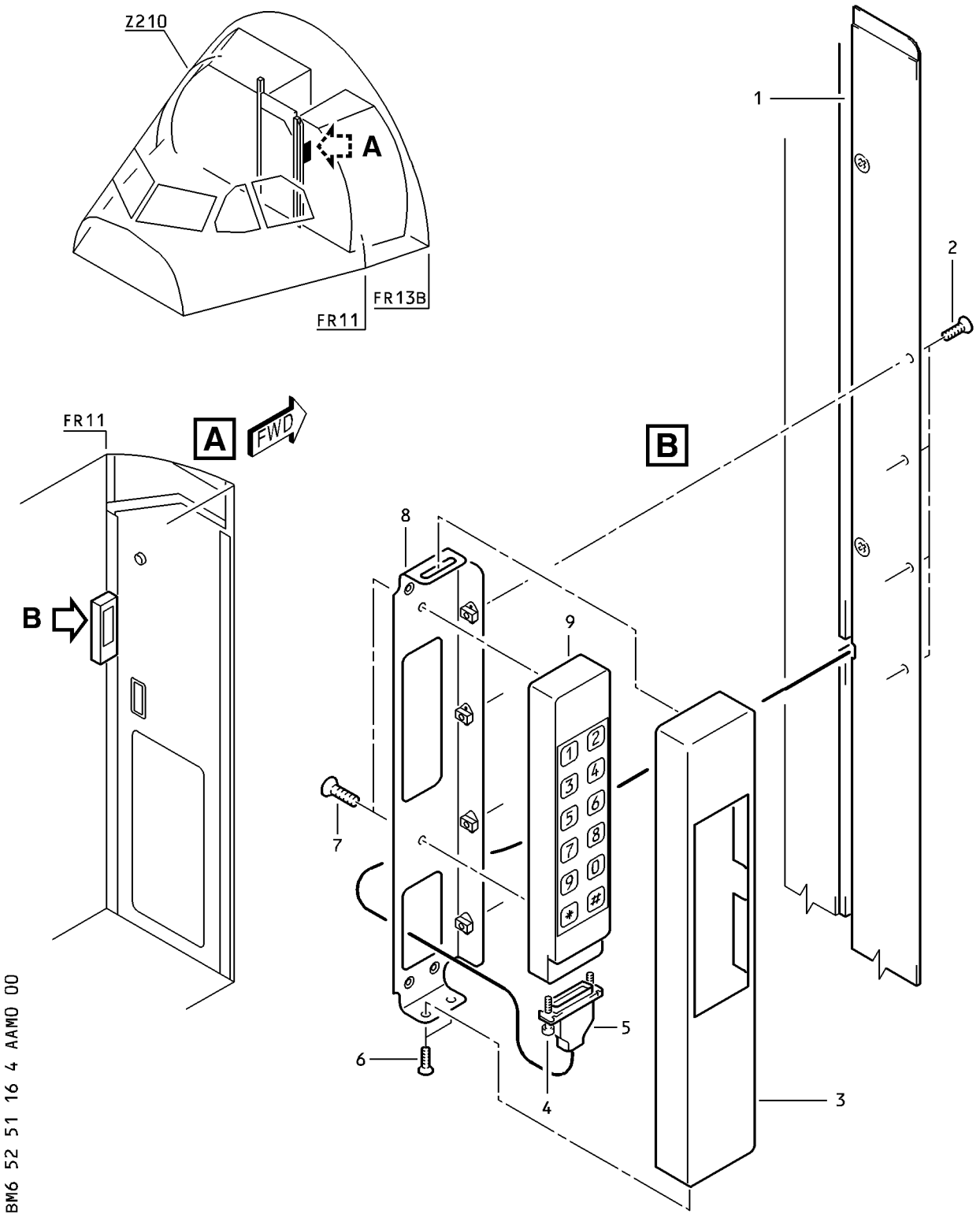
PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

B. Removal (Ref. Fig. 401)

**ON A/C ALL

(1)Open the flight compartment door.
(2)Remove the screws (6) and lift the cover (3) from the key pad bracket (8).
(3)Loosen the screws (4) and disconnect the electrical connector (5) from the key pad (9).
(4)Put blanking caps on the disconnected electrical connectors.
(5)Remove the screws (2) and the key pad bracket (8) from the gap cover (1).
(6)Remove the screws (7) and the key pad (9) from the key pad bracket (8).
(7)Safety the electrical connector (5) to the door post temporarily with ty-wraps.

C. Installation
(1)Clean the component interface and/or the adjacent area.



Key Pad
Figure 401

(2)Do a visual inspection of the component interface and/or the adjacent area.
(3)Remove the ty-wraps and pull the electrical connector (5) through the bracket (8).
(4)Position the key pad (9) on the key pad bracket (8) and attach it with the screws (7).
(5)Position the key pad bracket (8) on the gap cover (1) and attach it with the screws (2).
(6)Remove the blanking caps from the electrical connector (5).
(7)Make sure that the electrical connector (5) is clean and in the correct condition.
(8)Connect the electrical connector (5) to the key pad (9) and attach it with the screws (4).
(9)Assemble the cover (3) on the key pad bracket (8) so that its top correctly engages in the slot of the key pad bracket (8).
(10)Install the screws (6) to attach the cover (3) at the bottom angle of the key pad bracket (8).

**ON A/C ALL

D. Tests
(1)Remove the safety clip and tag and close the circuit breaker: 1MQ.
(2)Do the operational tests of the emergency access to make sure that the key pad operates satisfactory (Ref. 52-51-00, P. Block 501).

E. Close-Up
(1)Make certain that the working area is clean and clear of tools and miscellaneous items of equipment.

R **ON A/C ALL

R

CIRCUIT BREAKER BOX (60MQ) - REMOVAL/INSTALLATION

1. Reason for the Job

Self Explanatory

**ON A/C ALL

R

2. Equipment and Materials

ITEM	DESIGNATION
No specific	Blanking caps
Referenced Procedures AWM 525102 ESPM 204825 24-42-00, P. Block 301	A/C External Power Control

**ON A/C ALL

R

3. Procedure

A. Job Set-Up
(1)Connect the electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Make certain that electronic racks ventilation is correct.
(3)Make sure that the access to the cockpit is available.
(4)Open, safety and tag the following circuit breaker:

PANEL	DESIGNATION	FIN	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

B. Removal

**ON A/C ALL

R

(Ref. Fig. 401)

**ON A/C ALL

R

(1)Carefuly remove the screws (4), the washers (5) and the cockpit cover (3) from the door pillar (2).
(2)Disconnect the wire harness (7) of the circuit breaker box (10) as follows:

CAUTION : MAKE MATCH MARKS ON ALL THE ELECTRICAL WIRES BEFORE YOU DISCONNECT THEM.
INCORRECT CONNECTION OF WIRES WILL CAUSE DAMAGE TO EQUIPMENT.

(a)Disconnect the electrical connectors (9) of the wire harness (17) from the electrical connectors (8) of the wire harness (7) (Ref. ESPM 204825).

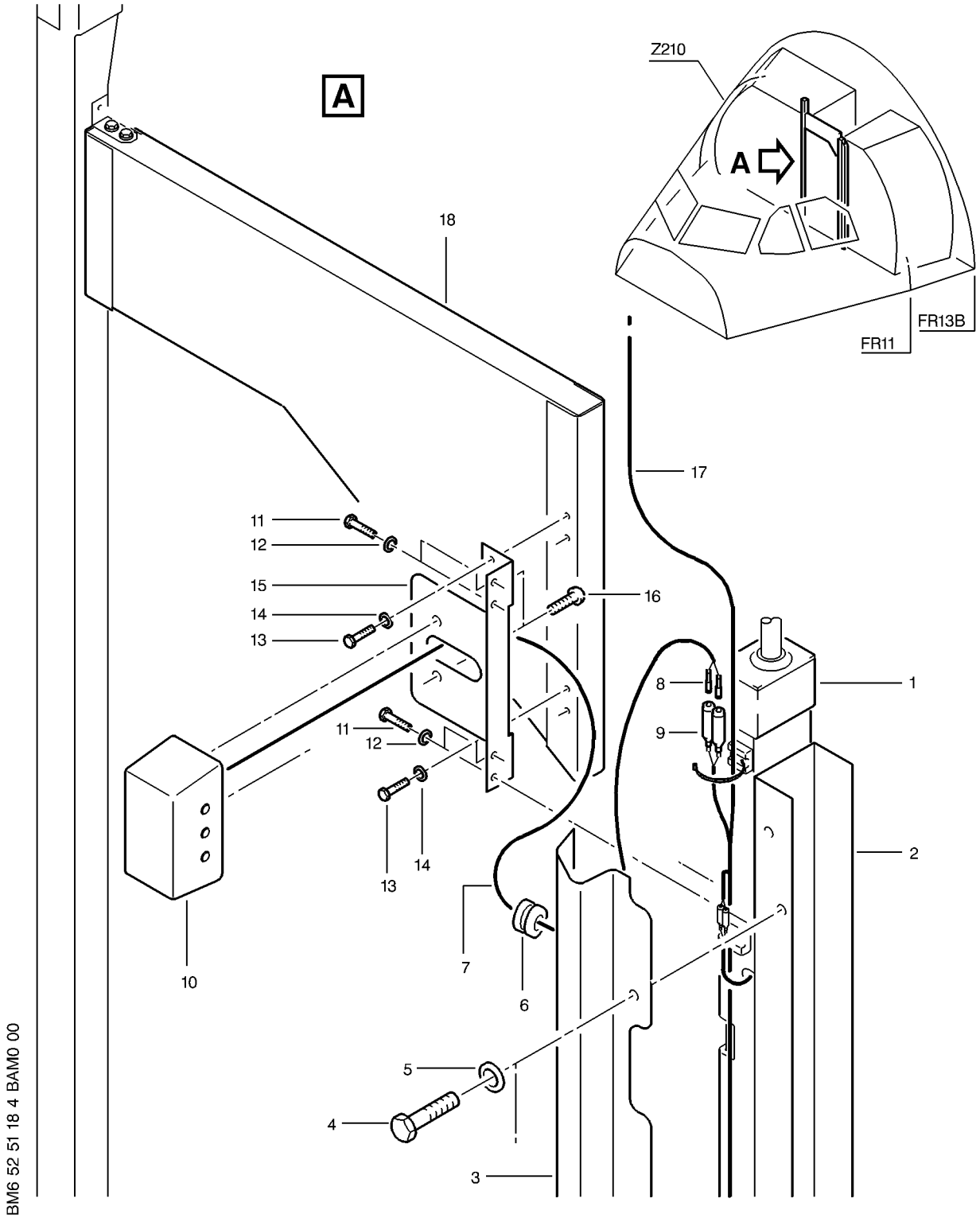
NOTE : For wire identification see AWM (Ref. AWM 525102).

(b)Put blanking caps on the disconnected electrical connectors.
(3)Remove the grommet (6) and the wire harness (7) from the cockpit door cover (3).
(4)Remove the screws (11) and the washers (12) from the door post (1).
(5)Support the circuit breaker box (10) and remove the screws (13), the washers (14) and the bracket (15) from the fixed partition (18).
(6)Hold the circuit breaker box (10) and remove the screws (16) from the bracket (15).
(7)Remove the circuit breaker box (10) with its wire harness (7) from the bracket (15).

**ON A/C ALL

R

C. Installation (Ref. Fig. 401)
(1)Clean the component interface and/or the adjacent area.
(2)Do a visual inspection of the component interface and/or the adjacent area.
(3)Put the wire harness (7) through the bracket (15) and attach the circuit breaker box (10) with the screws (16) on the bracket (15).



Circuit Breaker Box
Figure 401

(4)Position the bracket (15) with the circuit breaker box (10) to the fixed partition (18) and attach it with the screws (13) and the washers (14).
(5)Install the screws (11) and the washers (12) to attach the bracket (15) on the door post (1).
(6)Position the wire harness (7) to the cockpit cover (3) and install the grommet (6).
(7)Connect the wire harness (7) of the circuit breaker box (10) with wire harness (17) as follows:

CAUTION : REFER TO THE MATCH MARKS MADE DURING THE REMOVAL WHEN YOU CONNECT THE ELECTRICAL WIRES.
INCORRECT CONNECTION OF THE WIRES WILL CAUSE DAMAGE TO EQUIPMENT.

(a)Remove the blanking caps from the electrical connectors.
(b)Make sure that the electrical connectors are clean and in the correct condition.
(c)Connect the electrical connectors (9) of the wire harness (17) to their related electrical connectors (8) of the wire harness (7) (Ref. ESPM 204825).
(8)Put the cockpit cover (3) in position to the door pillar (2) and install the screws (4) and the washers (5).

**ON A/C ALL

R

D. Test
(1)Remove the safety clip and the tag and close circuit breaker 1MQ:
(2)Make sure that the cockpit door is opened.
(3)Do the operational test, as follows:

ACTION	RESULT
1. On the circuit breaker box 40MQ: - open the C/B "TOP STRIKE PWR SUPPLY".	On the door panel: - the related electrical release strike 30MQ is de-energized.
2. On the door post: - move the catch of the applicable electrical release strike manually.	On the door post: - the catch moves easily.
3. On the Circuit Breaker Box 40MQ: - close the C/B "TOP STRIKE PWR SUPPLY".	On the door post: - the applicable electrical release strike 30MQ is energized.
- move the catch of the applicable electrical release strike	- the catch does not move.

ACTION	RESULT
manually.	
- open and close the C/B "MID STRIKE PWR SUPPLY" and repeat the test.	- the result of the electrical release strike 31MQ is the same.
- open and close the C/B "BOT STRIKE PWR SUPPLY" and repeat the test.	- the result of the electrical release strike 32MQ is the same.

E. Close-Up
(1)Make sure that the work area is clean and clear of tools and other items.
(2)If removed, install the upper sidewall panel (Ref. 25-13-21, P. Block 401).
(3)De-energize the ground service network (Ref. 24-42-00, P. Block 301).

**ON A/C ALL

R

1. Equipment and Materials

ITEM	DESIGNATION
A. Material No. 19-010	Lockwire (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power
- 52-51-11, P. Block 501	Flight Compartment Door

2. Procedure

A. Job Set-Up
(1)Make sure that access to the cockpit is available.
(2)Connect the electrical ground power.
(3)Make certain that the electronic rack ventilation is correct.
(4)Open, safety and tag this (these) circuit breaker(s):

PANEL	SERVICE	IDENT.	LOCATION
132VU	COCKPIT DOOR	1MQ	321/P85

B. Removal (Ref. Fig. 401)
(1)Remove the center latch mechanism (13) as follows:
R (a)Remove the fasteners (7), the plugs (28), the screws (5),(17), the
R washers (26) and the covers (4) and (11).
(b)Remove the plugs (10), the screws (9) and the washers (14) from the center latch mechanism (13).
(c)Remove the fasteners (27) and the cover plate (8) together with the D-ring from the center latch mechanism (13).
(d)Remove and discard the cotter pins (23) at each end of the tie-rods (6) and (12).
(e)Remove the washers (22), the bushes (19) and the clevis pins (18) from the levers (20).
(f)Remove the center latch mechanism (13) from the door (1).
(2)Remove the top and bottom latch mechanisms (2) and (15) as follows:
(a)Remove the screws (3) from the top latch mechanism (2).
(b)Remove the top latch mechanism (2) from the door (1).
(c)Remove the screws (16) from the bottom latch mechanism (15).
(d)Remove the bottom latch mechanism (15) from the door (1).

**ON A/C ALL

C. Installation (Ref. Fig. 401)

(1)Clean the component interface and/or the adjacent area.

(2)Do a visual inspection of the component interface and/or the adjacent area.

(3)Put the top latch mechanism (2) in position and install it with the screws (3).

R (4)Make sure that the edge of the top latch mechanism (2) aligns with
R the door blade edge.

R (5)Install the tie-rod (6) on the top latch mechanism as follows:

(a)Put the clevis pin (18) in position through the lever (20).

R (b)Put the bush (19) in position at the clevis pin (18).

(c)Put the eye-end (21) of the tie-rod (6) on the clevis pin (18).

(d)Put the washers (22) in position on the clevis pin (18) and install the new cotter pin (23).

R (6)Install the tie-rods (6) and (12) at the center latch mechanism (13) as follows:

(a)Put the clevis pins (18) in position through the levers (20).

R (b)Put the bushes (19) in position at the clevis pins (18).

(c)Put the eye-ends (21) of each tie-rod (6) and (12) on the related clevis pin (18).

(d)Put the washers (22) in position on the clevis pins (18) and install the new cotter pins (23).

R (e)Put the plate (8) together with the D-ring in position at the center latch mechanism (13) and install the fasteners (27).

R (7)Put the center latch mechanism (13) in position on the door (1) and install it with the washers (14) and the screws (9).

(8)Make sure that the edge of the center latch mechanism (13) aligns with the door blade edge.

R (9)Install the plugs (10) on the screws (9) of the center latch
R mechanism (13).

R (10)Put the bottom latch mechanism (15) in position on the door (1) and install it with the screws (16).

(11)Make sure that the edge of the bottom latch mechanism (15) aligns with the door blade edge.

(12)Install the tie-rod (12) on the bottom latch mechanism (15) as follows:

(a)Put the clevis pin (18) in position through the lever (20).

(b)Put the bush (19) in position to the clevis pin (18).

(c)Put the eye-end (21) of the tie-rod (12) on the clevis pin (18).

(d)Put the washers (22) in position on the clevis pin (18) and install the new cotter pin (23).

(13)If necessary, adjust the tie-rods (6) and (12) to make sure that there
R is no play in the linkage (refer para. D.).

(14)Make sure that the position of the latch mechanisms (2),(13) and (15) is correctly adjusted (Ref. 52-51-11, P. Block 501).

**ON A/C ALL

D. Adjustment (Ref. Fig. 401)

R CAUTION : USE THE DOUBLE WRENCHING PROCEDURE TO TORQUE THE JAM NUTS
R (USE ONE WRENCH ON THE JAM NUT AND A SECOND WRENCH ON THE ROD).
R ALSO MAKE SURE THAT YOU DO NOT APPLY TOO MUCH TORQUE TO THE JAM
R NUTS. IF YOU DO NOT USE THIS PROCEDURE, THE APPLIED TORQUE CAN
R TWIST THE BELL CRANK. IF YOU APPLY TOO MUCH TORQUE, THE BELL
R CRANK WILL BREAK.

(1)Adjust the tie-rods (6) and (12) as follows:
(a)Remove the lockwire from the safety devices (25) of the tie-rods (6) and (12).
(b)Loosen both locknuts (24) of each of the tie-rods (6) and (12).
(c)Turn the body of the tie-rods (6) and (12) to make sure that:
- the latch tenons are fully extended,
- there is no play in the linkage.

NOTE : The tie-rod barrel has a right hand thread at one end and a
R left hand thread at the other end. Thus, you can adjust
the length of the tie-rod if you turn its barrel.

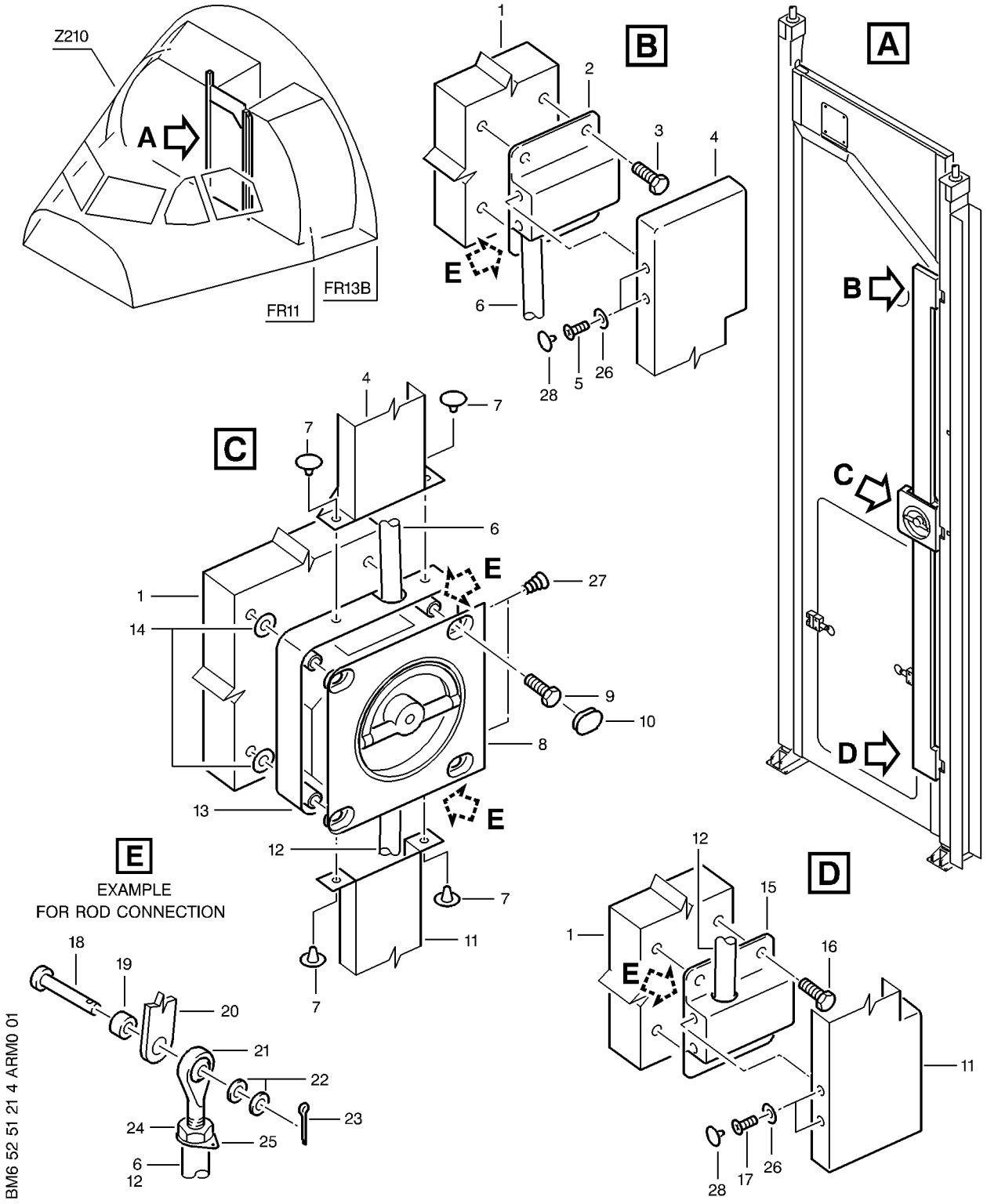
(d)Tighten the locknuts (24) against the barrel of the tie-rods (6) and (12) with max. 034m.daN (30.08 lbf.in.).
R (e)Safety the locknuts (24) with lockwire, (Material NO. 19-010) to the safety devices (25).
R (f)Put the covers (4) and (11) in position and install the washers (26), the screws (5),(17), the plugs (28) and the fasteners (7).

**ON A/C ALL

E. Test
R (1)Remove the safety clip and the tag and close this circuit breaker: 1MQ
(2)Do the operational test of the CDLS (Ref. 52-51-00, P. Block 501) to
R make sure that the three latch mechanisms operate correctly.

**ON A/C ALL

(Ref. Fig. 401)



Three Latch Mechanisms
Figure 401

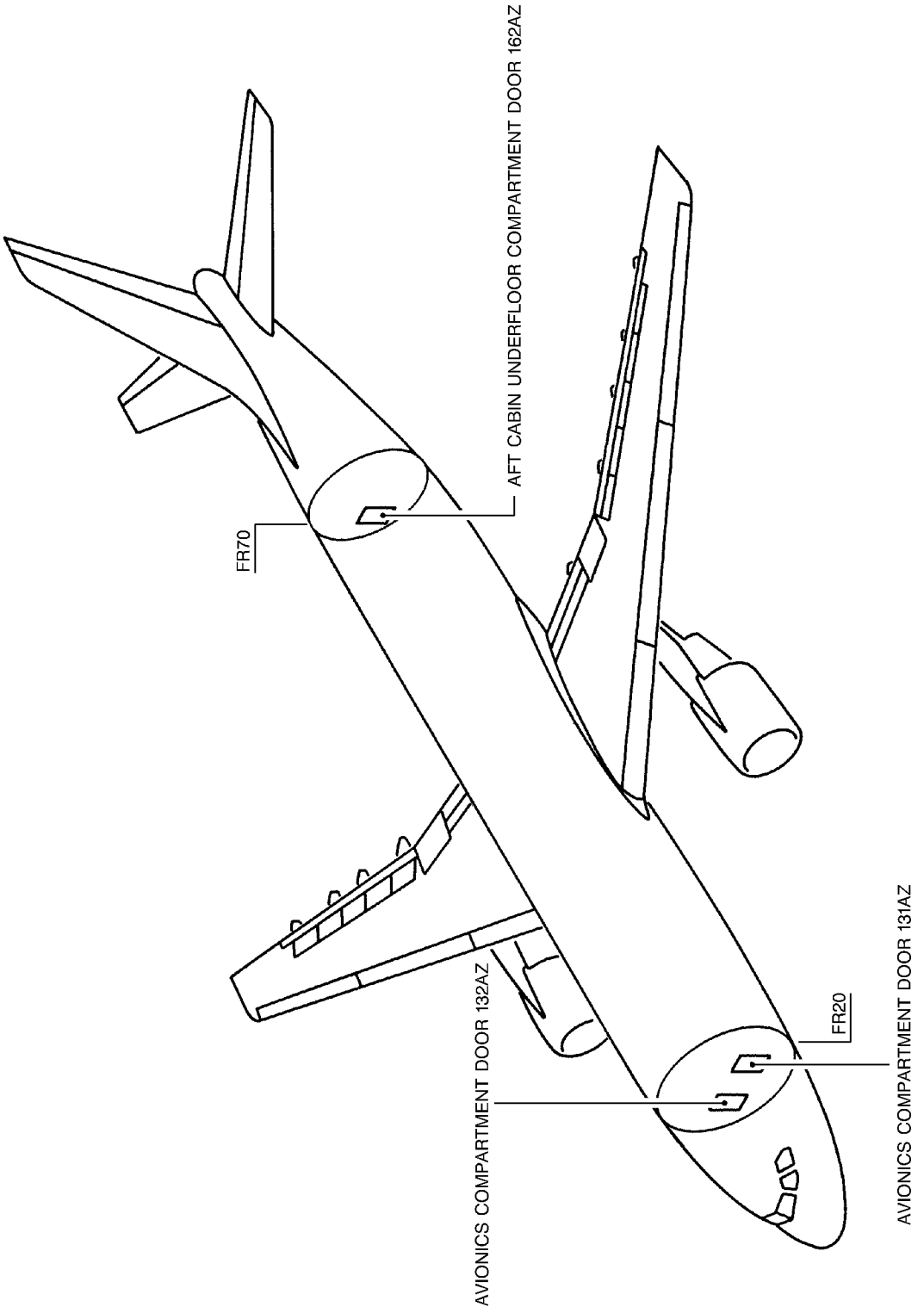
R

FIXED INTERIOR DOORS IN LOWER FUSELAGE
DESCRIPTION AND OPERATION

1. General
   These doors are provided to give access for servicing equipment and systems located in the lower fuselage.

2. Component Location
   (Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
131AZ	DOOR-AVIONICS COMPARTMENT FRAME 20		131	811	52-52-00
132AZ	DOOR-AVIONICS COMPARTMENT FRAME 20		132	811	52-52-00



Component Location
Figure 001

3. Doors - Avionics Compartment Frame 20 - 131AZ, 132AZ

A. General
Two access doors at avionics compartment partition STA1446/FR20 symmetrically located with respect to the aircraft centerline to provide access to the avionics compartment through the cargo compartment.

B. Description

**ON A/C 001-005, 101-200,

(Ref. Fig. 002)

**ON A/C 006-100,

(Ref. Fig. 003)

**ON A/C 001-005, 101-200,

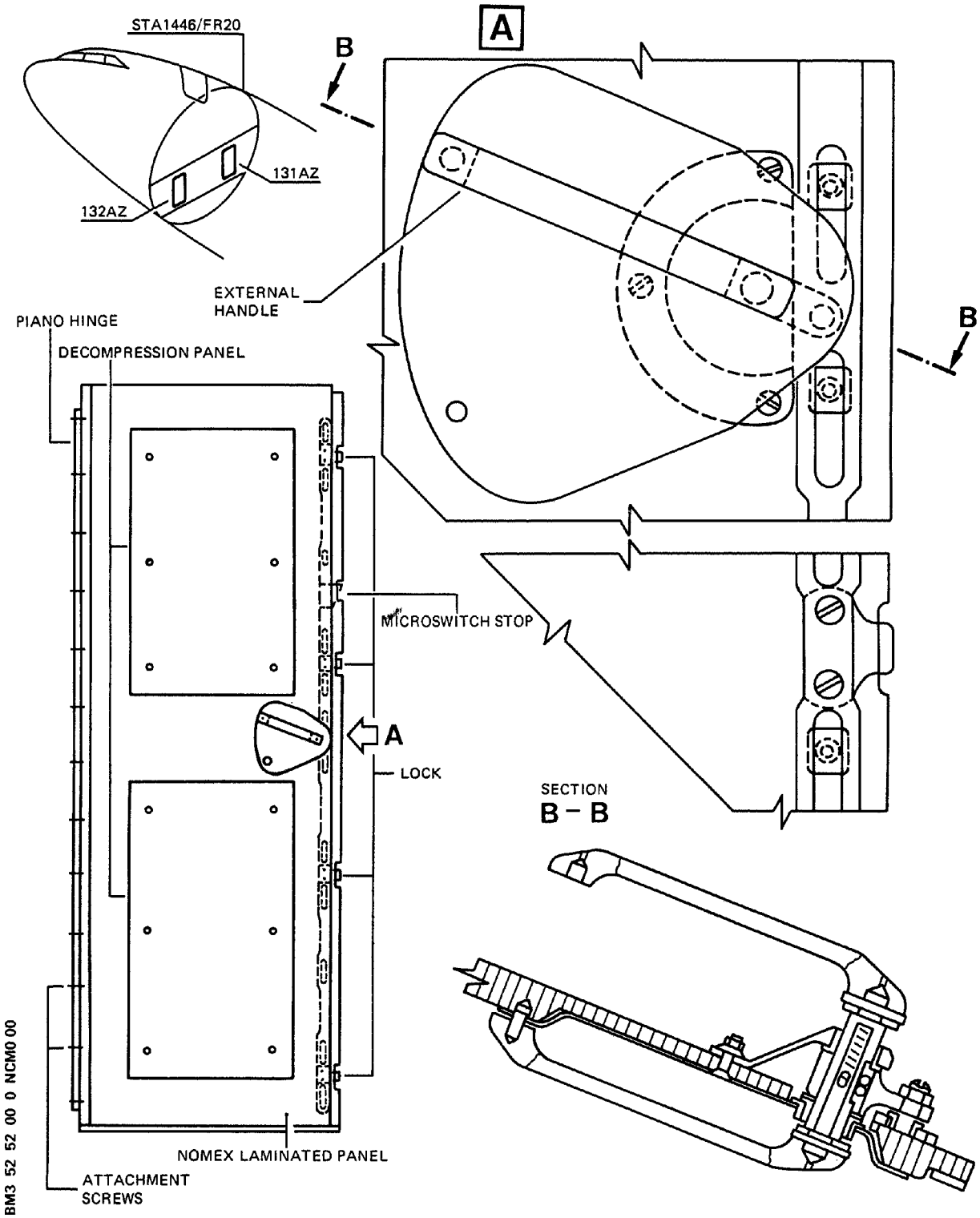
The doors are made from synthetic laminates, and supported on piano hinges attached to the LH and RH side panels of partition frame 20 by countersunk screws.
Two synthetic laminate decompression panels in each door are retained by catch assys.
A locking device comprised of a push rod carrying four latches sliding on tracks is attached to the side opposite the hinge.
The push rod is operated by two handles, one internal, the other external. A pin protruding from the back of the spring loaded external handle locates in holes in the handle recess cover plate, locking the handle in closed or open position. The handles actuate a crank on which is fitted a roller moving in a slot located on the door structure. Movement of the handles causes vertical movement of the push rod and latches which engage in stops on partition structure to lock the door. The locking of the door is indicated to the crew through a microswitch on the structure which is operated by a stop attached to the push rod.

C. Operation
To open or close door from cargo compartment pull handle and turn, from avionics compartment push handle and turn.

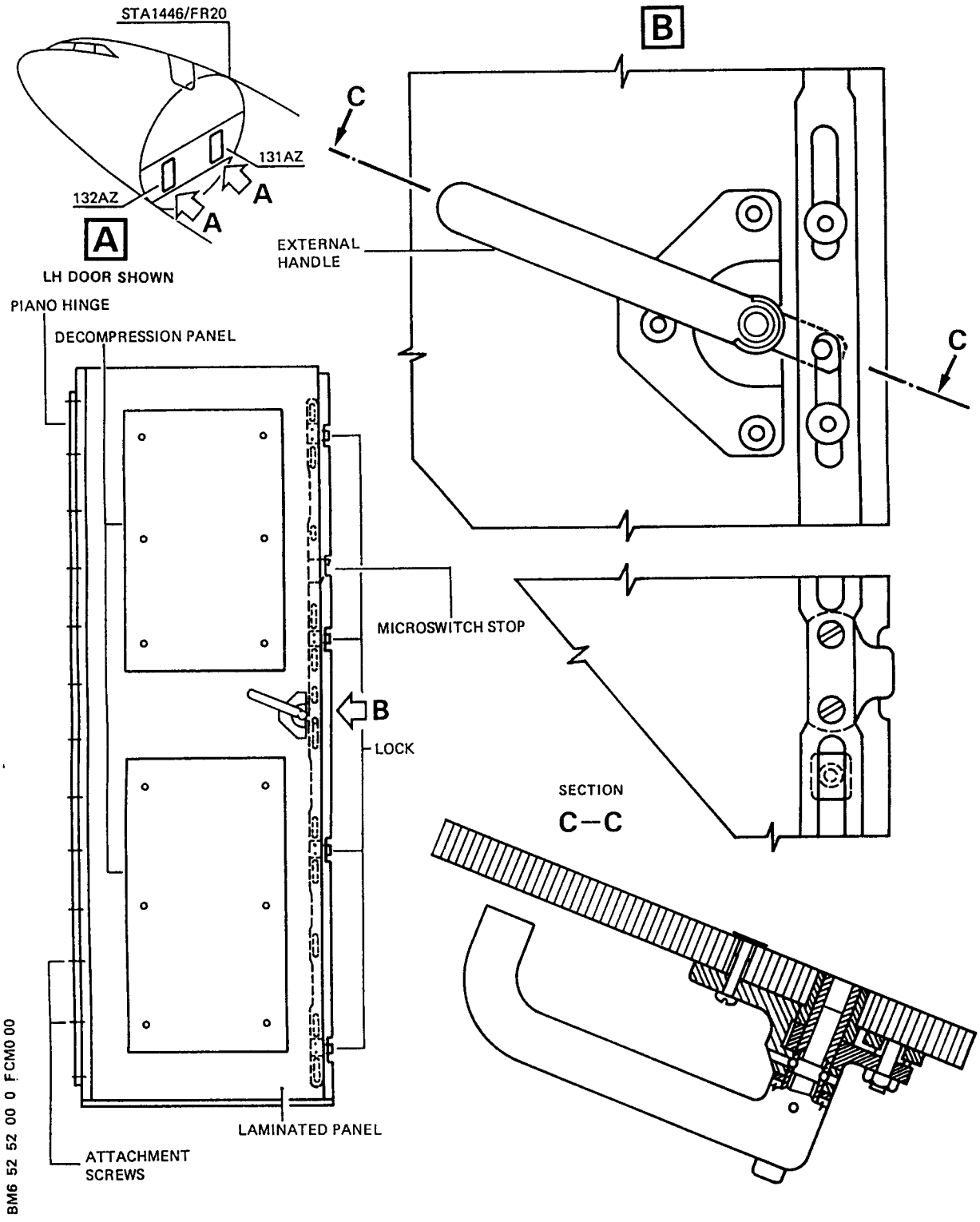
4. Door - AFT Cabin Underfloor Compartment 162AZ

A. General
The AFT cabin underfloor compartment access door 162AZ is located on the RH side of the BULK cargo compartment rear wall, and provides access between the BULK cargo compartment and the AFT cabin underfloor compartment. The door is hinged, opens into and is closed from the cargo compartment.

B. Description



Doors 131AZ, 132AZ to Avionics Compartment
Figure 002



Doors 131AZ, 132AZ to Avionics Compartment
Figure 003

**ON A/C 006-100,

The doors are made from synthetic laminates, and supported on piano hinges attached to the LH and RH side panels of partition FR20 by countersunk screws.
Two synthetic laminate decompression panels in each door are retained by catch assys.
A locking device comprised of a push rod carrying four latches sliding on tracks is attached to the side opposite the hinge.
The push rod is operated by a handle. The handle actuates a crank on which is fitted a roller moving in a slot located on the door structure.
Movement of the handle causes vertical movement of the push rod and latches which engage in stops on partition structure to lock the door.
The locking of the door is indicated to the crew through a microswitch on the structure which is operated by a stop attached to the push rod.

C. Operation
To open or close door from cargo compartment use a special key (square insert 0.25 in.), from avionics compartment press the knob on the handle and turn.

4. Door - AFT Cabin Underfloor Compartment 162AZ

A. General
The AFT cabin underfloor compartment access door 162AZ is located on the RH side of the BULK cargo compartment rear wall, and provides access between the BULK cargo compartment and the AFT cabin underfloor compartment. The door is hinged, opens inwards and is closed from the cargo compartment.

B. Description

**ON A/C ALL

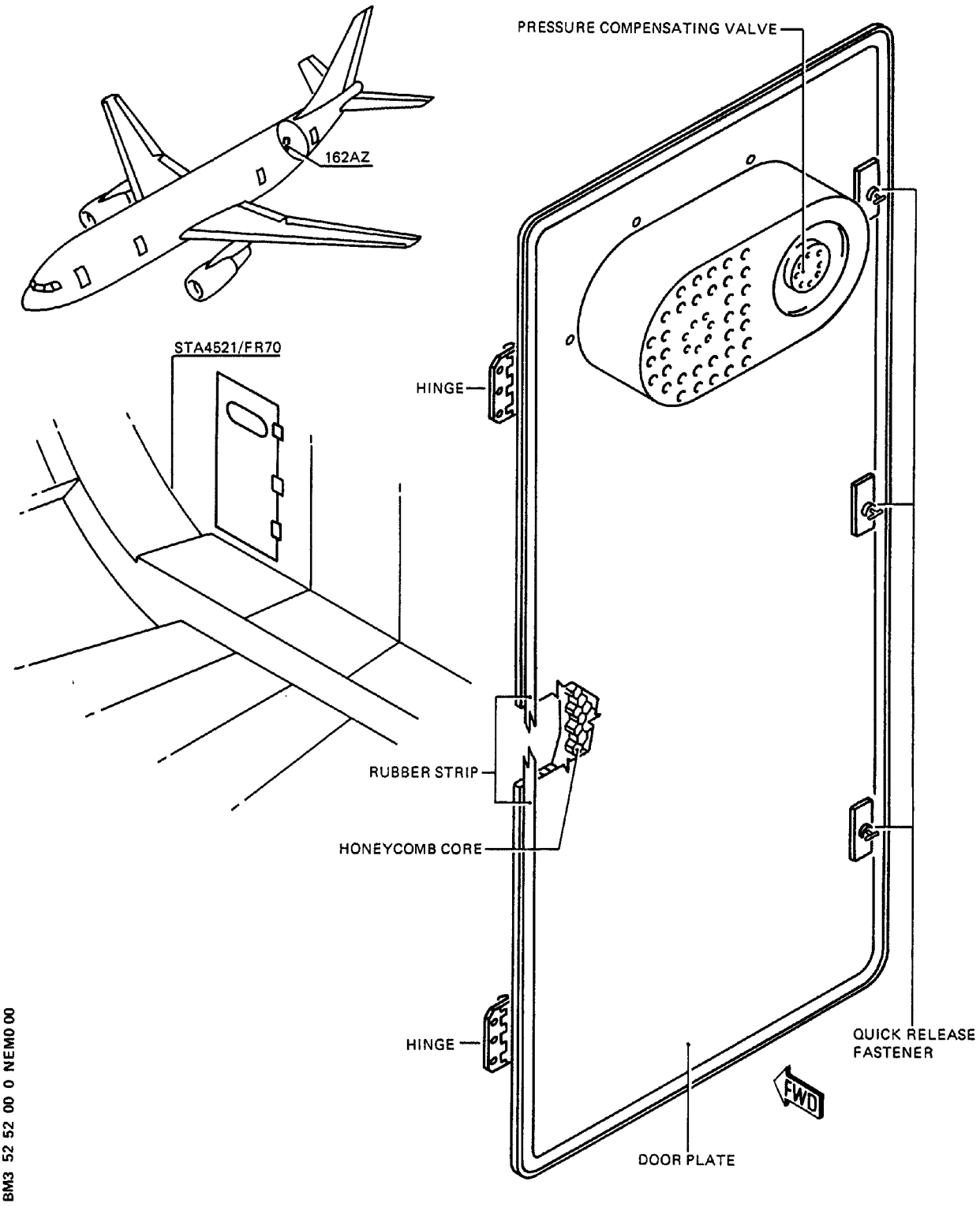
(Ref. Fig. 004)

**ON A/C 001-005, 101-200,

The door consists of a door panel, handle, valve, hinges, rubber strips and quick-release fasteners.
The door panel is basically rectangular with the bottom RH corner bevelled off. The door panel has a honeycomb synthetic laminate core and is reinforced on both sides either by light metal sheet or is covered on both sides with several layers of resin impregnated glassfiber cloth.
Two hinges are fitted on the LH side of the door and are attached with screws to the partition.

**ON A/C 006-100,

The door consists of a door panel, handle, valve, hinges, rubber strips



AFT Cabin Underfloor Compartment Door 162AZ
Figure 004

and quick-release fasteners.
The door panel is basically rectangular with the bottom RH corner bevelled off. The door panel has a honeycomb synthetic laminate core and is covered on both sides with several layers of resin-impregnated glassfiber cloth.
Two hinges are fitted on the LH side of the door and are attached with screws to the partition.

AFT CABIN UNDERFLOOR COMPARTMENT ACCESS DOOR REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.3 m (7.5 ft.)
B. Material No. 05-002	Special Materials (Ref. 20-31-00)

2. Procedure

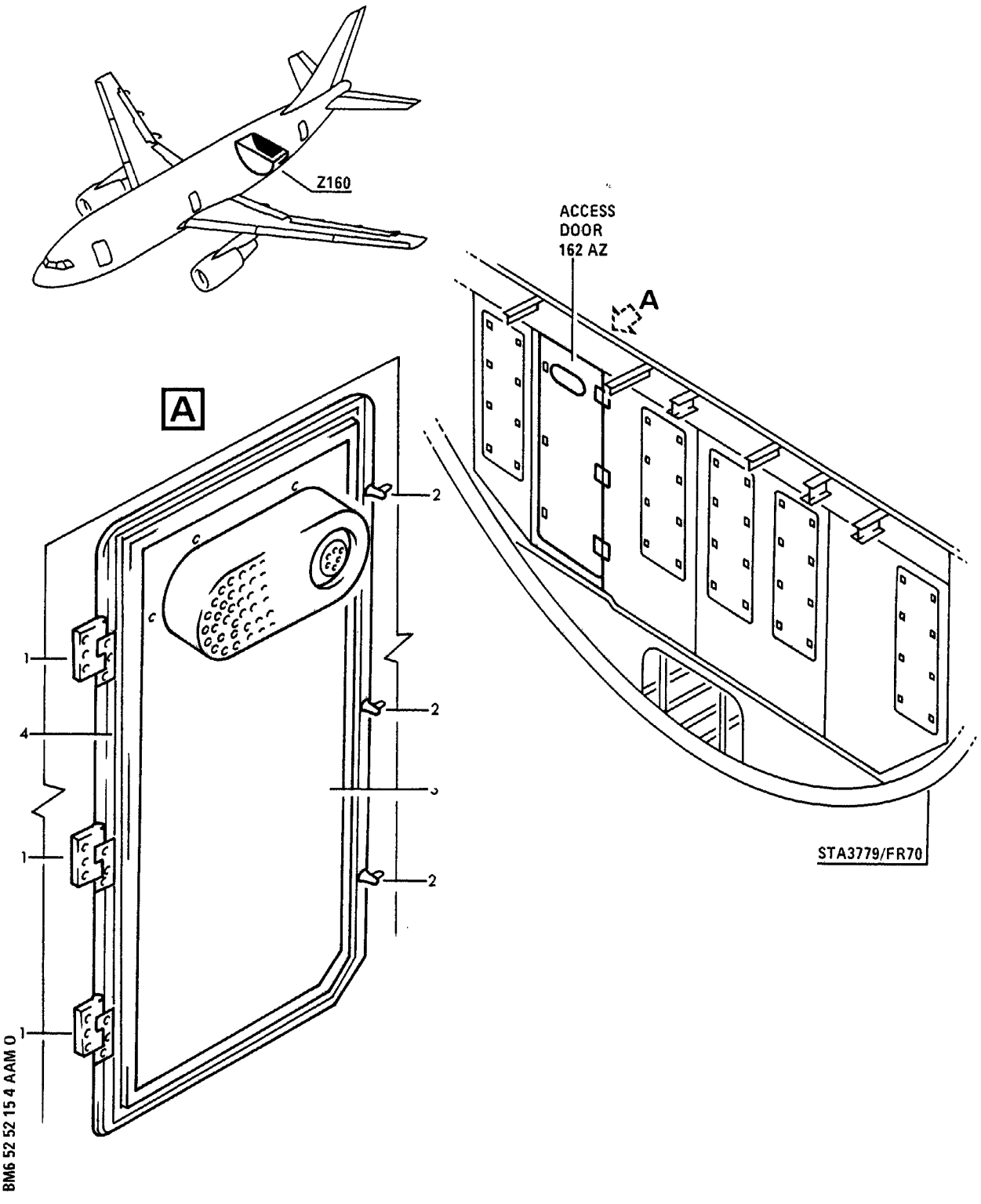
A. Job Set-Up
(1)Position access steps.
(2)Open BULK cargo compartment door.

B. Removal (Ref. Fig. 401)
(1)Turn quick-release fasteners (2) and open door (3).
(2)Support door (3), remove screws securing hinges (1) and remove door (3).

C. Preparation for Installation
(1)Check door seal (4) for good condition and renew, if necessary.

D. Installation
(1)Apply corrosion preventive paste (Mat. No. 05-002) to threads of all screws.
(2)Position door (3) and attach each hinge (1) with one screw. Lightly tighten screws.
(3)Close and open door (3) to check correct alignment.
(4)Install remaining screws and tighten.
(5)Make certain that door seal (4) is positioned around periphery of door (3).
(6)Make certain that working area in aft cabin underfloor compartment is clean, and clear of tools and miscellaneous items of equipment.
(7)Secure door (3) in closed position with quick-release fasteners (2).

E. Close-Up
(1)Make certain that working area is clean, and clear of tools and miscellaneous items of equipment.
(2)Close BULK cargo compartment door.
(3)Remove access steps.



Aft Cabin Underfloor Compartment Access Door 162AZ
Figure 401

AFT CABIN UNDERFLOOR COMPARTMENT ACCESS DOOR INSPECTION/CHECK

NOTE : If damage is evident, during the following inspection/check a structural repair must be carried out, or the component must be replaced.

1. General Check

A. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Steps, 2.3 m (7.50 ft.)

B. Procedure

(1)Job Set-Up
- (a)Position access steps.
- (b)Open BULK cargo compartment door.
- (c)Open aft cabin underfloor compartment access door 162AZ.

(2)Visual inspection of door panel and door seal.
- (a)Make certain that door seal is in good condition and is properly bonded around periphery of door.
- (b)Visually inspect both sides of door panel for damage.
  - 1 Greatest length of repairable damage in the form of a crack or groove is 25 mm (1.0 in.).
  - 2 Largest diameter of repairable surface damage is 25 mm (1.0 in.).
    NOTE : d = thickness of damaged facing layer.
  - 3 Minimum distance to component/door edge is 300 x d.
  - 4 Minimum distance from nearest fixing/attach point of component/door or location to a further component is 800 x d.
  - 5 Minimum distance from a further repair area is 500 x d.

(3)Visual inspection of door fittings and valve.
- (a)Visually inspect door hinges for security, distortion, cracks and corrosion.
- (b)Inspect pressure compensating valve for security, free movement, and that vent holes at each side of the access door, are free from obstruction.

(4)Functional check of door operation and security.
- (a)Close and open door to make certain that the door moves freely on its hinges and that door fits correctly in its aperture.
- (b)Check security and operation of quick-release fasteners and their receptacles.

(5)Close-Up
- (a)Make certain that working area is clean, and clear of tools and miscellaneous items of equipment.
- (b)Close and secure aft cabin underfloor compartment access door 162AZ.
- (c)Close BULK cargo compartment door.
- (d)Remove access steps.

FUSELAGE TAIL SECTION INTERIOR DOORS - DESCRIPTION AND OPERATION

1. General

A. The vertical stabilizer access doors, situated in the upper, rear part of the fuselage tail section, provide access to the inside of the vertical stabilizer spar box.

2. Component Location

(Ref. Fig. 001)

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF.
	DOOR, ACCESS-VERTICAL STABILIZER (311AZ)		311 312	312AR	
	DOOR, ACCESS-VERTICAL STABILIZER (311BZ)		311 312	312AR	

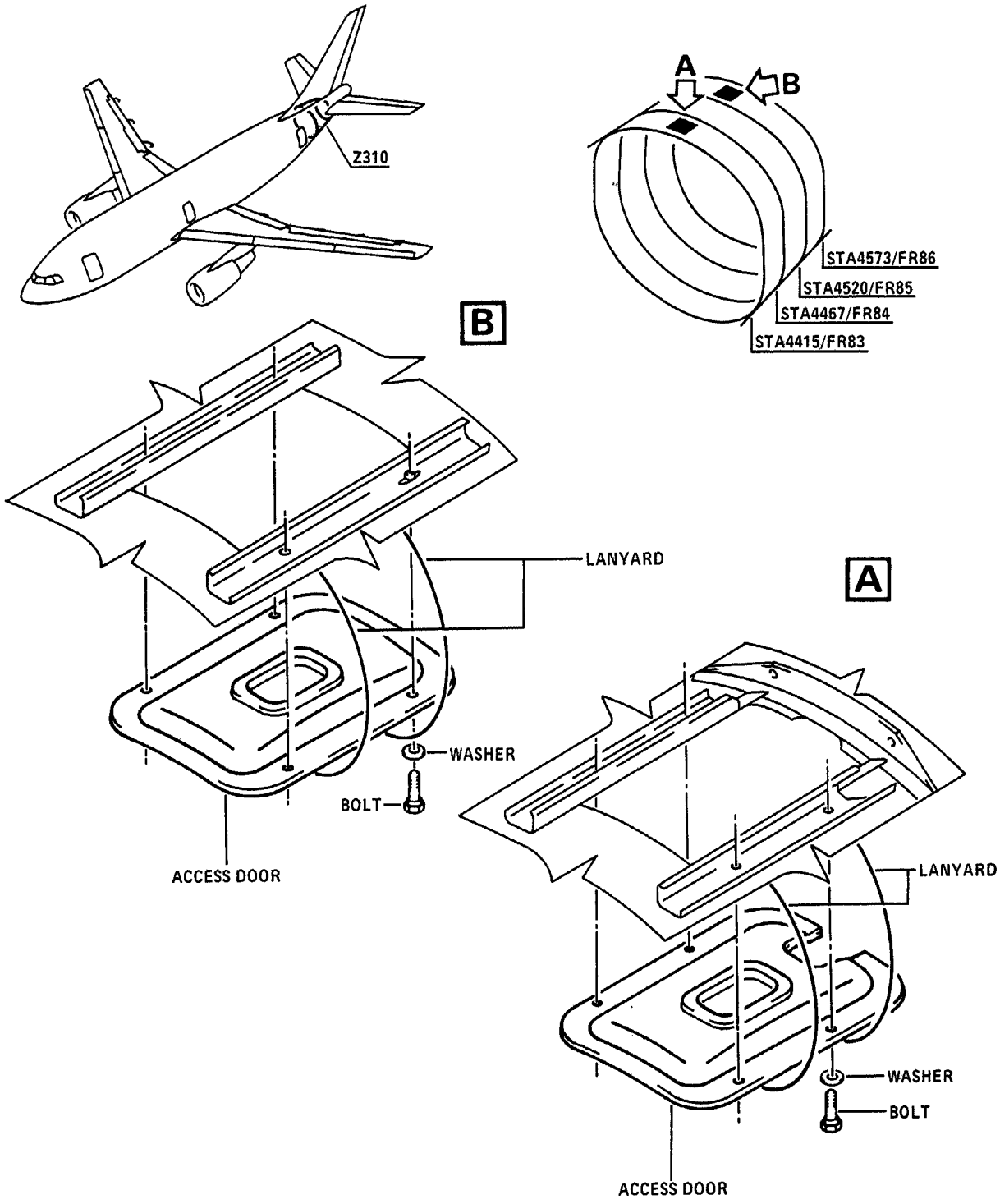
3. Description and Operation

A. The access doors are glassfiber-reinforced plastic constructions. An aperture in the center of the access doors is provided for the purpose of handling and the passage of bleed air in the event of a leak. Lanyards are attached to the fuselage structure and to the access doors.

B. Access door 311AZ has a cutout for the pushrods of the flight control system.

C. Each door is attached by bolts; corresponding anchor nuts are riveted to the fuselage structure.

D. The dished contour of the installed access door rises above the contour of the fuselage tail section.



Vertical Stabilizer Access Doors
Figure 001

1. General
(Ref. Fig. 001)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 002)

R **ON A/C ALL

Post SB 52-2039 For A/C 001-003,

R Post SB 52-2056 For A/C ALL

(Ref. Fig. 003)

**ON A/C 001-003,

The door warning system electrically monitors the condition, i.e.
"open/not locked" and "closed/locked" positions of the following doors:
- FWD and AFT Passenger/Crew Doors
- Emergency Exits
- FWD, AFT and BULK Cargo Compartment Doors
- Avionics Compartment Doors Frame 20 (131AZ,132AZ)
- Avionics Compartment Access Door (121BL)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

The door warning system electrically monitors the condition, i.e.
"open/not locked" and "closed/locked" positions of the following doors:
- FWD and AFT Passenger/Crew Doors
- Emergency Exits
- FWD, AFT and BULK Cargo Compartment Doors
- Avionics Compartment Doors Frame 20 (131AZ,132AZ)
- Avionics Compartment Access Door (121BL)

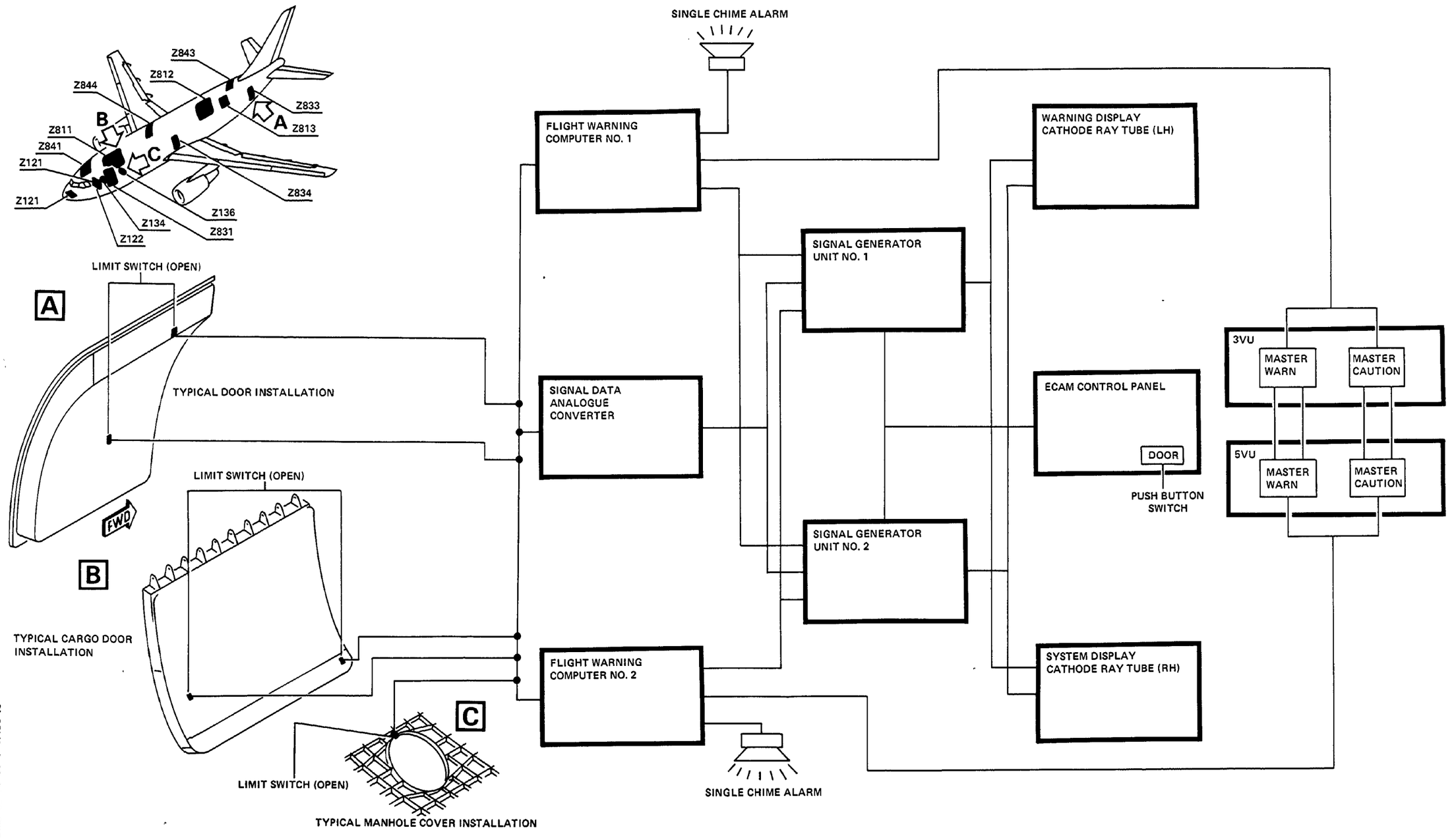
A residual pressure warning system is also installed in the following doors:
- the FWD and AFT Passenger/Crew Doors (LH and RH),
- the FWD and AFT Cargo Compartment Doors.

**ON A/C ALL

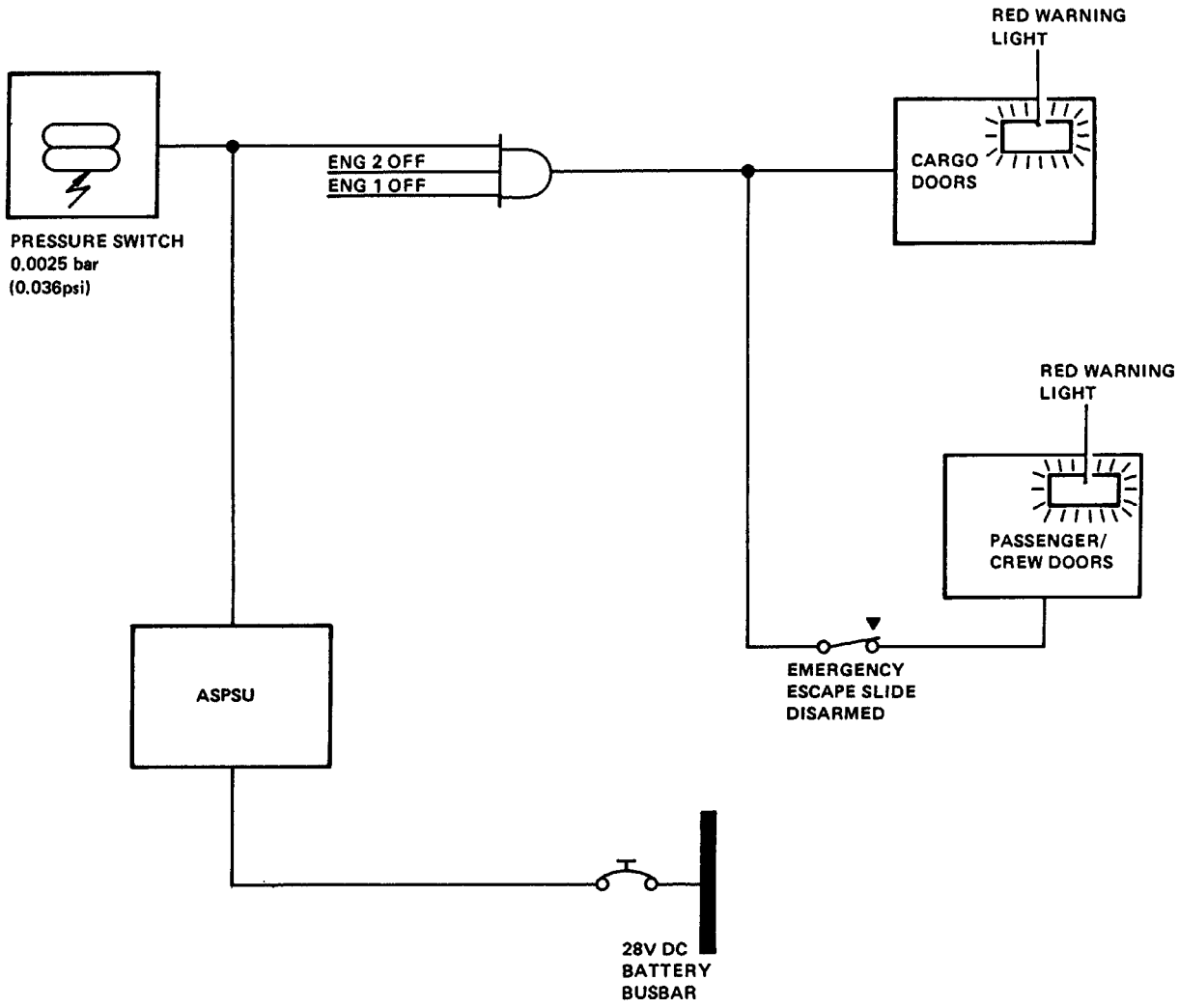
- Airconditioning Duct and Accessory Compartment Door

INTENTIONALLY BLANK

Printed in France

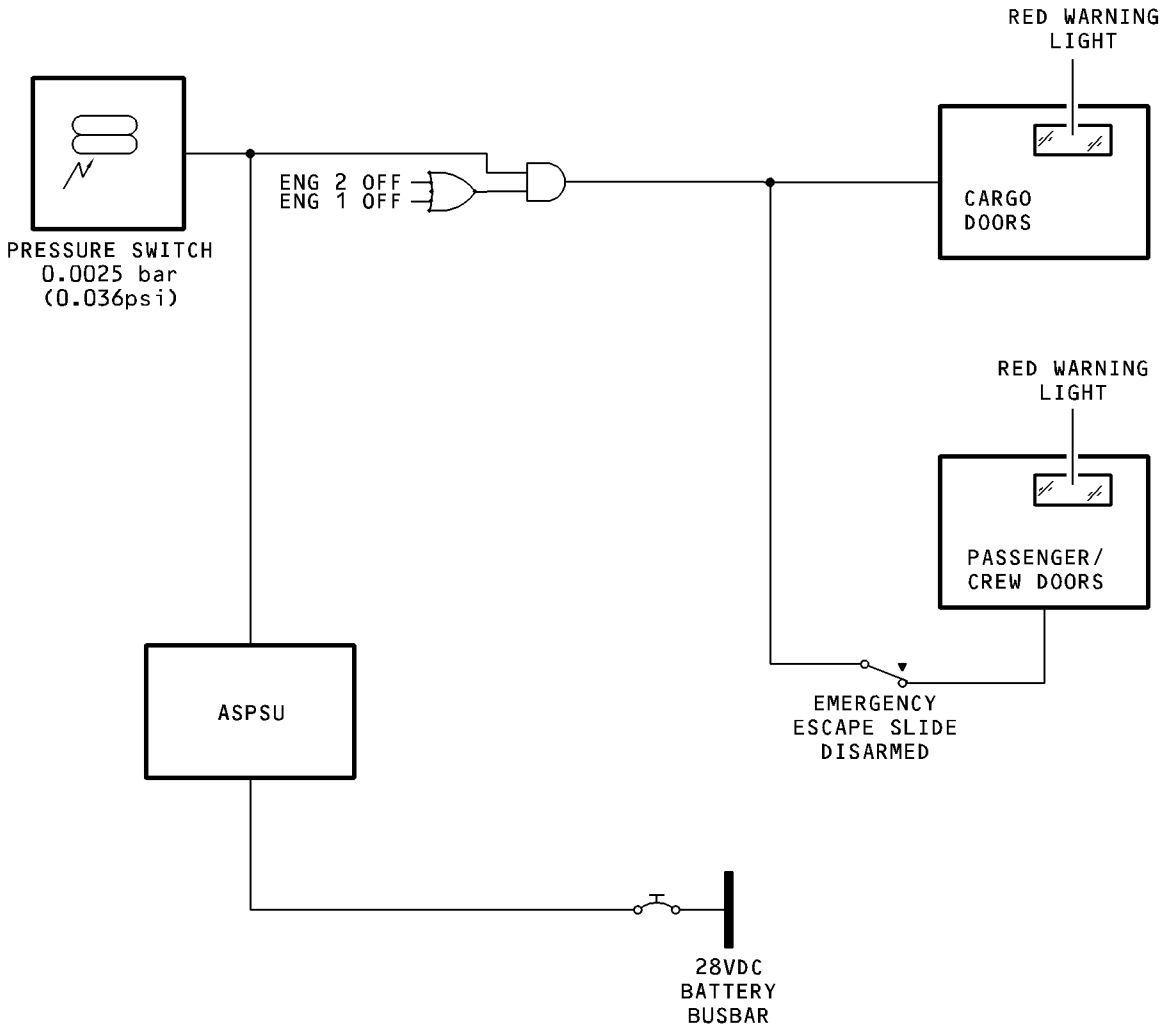


Door Warning System - Schematic
Figure 001



BM6 52 70 00 0 ABP0 00

Residual Pressure Warning System - Schematic
Figure 002



BM6 52 70 00 0 ABR0 00

Residual Pressure Warning System - Schematic
Figure 003

**ON A/C 001-003,

Incorporated in each door are warning switches which are open when the door is opened or unlocked. Displays are provided for the flight crew on the cockpit center pedestal. These comprise two MASTER CAUTION pushbutton switches, two Cathode Ray Tubes (CRTs) and a selection control panel, all of which form part of the Electronic Centralized Aircraft Monitoring (ECAM) system.
The following doors are monitored by two switches indicating "door open" and "door not locked":
- FWD and AFT Passenger/Crew Doors (LH and RH)
- FWD and AFT Cargo Compartment Doors

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

Incorporated in each door are warning switches which are open when the door is opened or unlocked. Displays are provided for the flight crew on the cockpit center pedestal. These comprise two MASTER CAUTION pushbutton switches, two Cathode Ray Tubes (CRTs) and a selection control panel, all of which form part of the Electronic Centralized Aircraft Monitoring (ECAM) system.
The following doors are monitored by two switches indicating "door open" and "door not locked":
- FWD and AFT Passenger/Crew Doors (LH and RH)
- FWD and AFT Cargo Compartment Doors
The residual pressure warning light installed in each door is in the form of a red flashing light. The warning lights convey a visual warning that residual pressure is present in the aircraft.

**ON A/C ALL

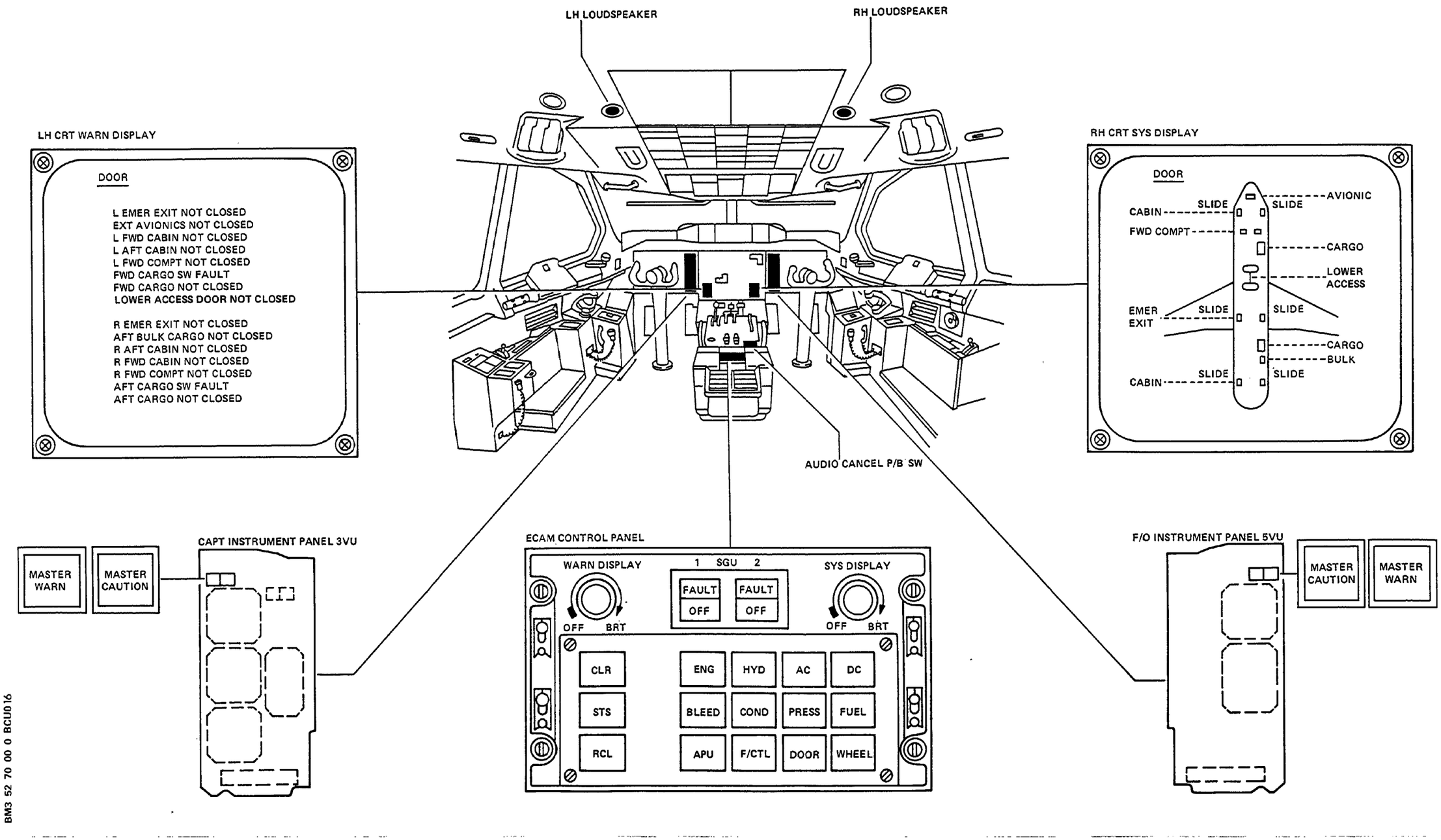
The following doors have a single switch indicating "door not closed":
- Passenger Compartment Emergency Exit (LH and RH)
- BULK Cargo Compartment Door
- Avionics Compartment Doors Frame 20 (131AZ,132AZ)
- Avionics Compartment Access Door (121BL)
- Airconditioning Duct and Accessory Compartment Door

2. Operation
(Ref. Fig. 004)

**ON A/C 001-003,

During automatic flight phase mode, the door warning display is monitored and shown on the CRT. The LH CRT shows a warning display in the form of relevant door title followed "NOT CLOSED" in amber when the door is unlocked or open. The RH CRT shows the system display in the form of a

INTENTIONALLY BLANK



Door Warning System - Cockpit Displays
Figure 004

synoptic of the door location together with a single word door title which comes on white when the door is closed and locked and amber when the door is unlocked or open. When the door warning display is out of flight phase mode and a monitored door is unlocked or opened, a single chime alarm is sounded in the cockpit and the **MASTER CAUTION** pushbutton switches on the captain main instrument panel 3 VU and first officer main instrument panel 5VU come on (amber). Selection of the **DOOR P/BSW** on the **ECAM** control panel will cause the door warning display to be shown on the **CRT**, thus enabling location of the open/unlocked door which will come on amber.
When the relevant door is properly closed and locked, the door synoptic comes on green and door title comes on white on the **RH CRT** and on the **LH CRT** warning message (amber) disappears. The **MASTER CAUTION** pushbutton switches will remain amber until the **CLEAR P/BSW** on the **ECAM** control panel or either of the **MASTER CAUTION** pushbutton switches is pressed. The **CRT**s will then revert to normal flight phase mode displays.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

A. Door Warning
During automatic flight phase mode, the door warning display is monitored and shown on the **CRT**s. The **LH CRT** shows a Warning Display in the form of relevant "door not locked" annotation displayed in white when the door is closed and locked and in amber when the door is unlocked or open. The **RH CRT** shows the System Display in the form of a synoptic of the door location together with a single word door title which comes on white when the door is closed and locked and amber when the door is unlocked or open. When the door warning display is out of flight phase mode and a monitored door is unlocked or opened, a single chime alarm is sounded in the cockpit and the **DOOR** warning light on the **WLDP** comes on amber. Selection of the **DOOR P/BSW** on the **ECAM** control panel will cause the door warning display to be shown on the **CRT**s, thus enabling location of the open/unlocked door which will come on amber.
When the relevant door is properly closed and locked, the display will come on white and green on the LH and **RH CRT**s respectively. The **DOOR** lamp on the **WLDP** will remain on amber until the **CLEAR P/BSW** on the **ECAM** control panel or the **WLDP** is pressed. The **CRT**s will then revert to normal flight phase mode displays and the **DOOR** lamp on the **WLDP** will go off.

B. Residual Pressure Warning
The residual pressure warning system monitors the residual pressure in the cabin and the **FWD** and **AFT** cargo compartments. A pressure switch in the electronics bay measures the residual cabin pressure. The pressure switch contains a membrane which activates the switch at a differential pressure of 0.0025 bar (0.0362 psi). When the pressure switch is activated, it precipitates the red warning light installed in each door to flash when the two engines are off and the escape slides are disarmed.

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT

FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

When the red warning lights are flashing, the legend "CABIN PRESSURE" is visible on the red surfaces of the warning lights. When the warning lights are dormant, the surfaces of the lights are white and the legends are not visible.
When the warning lights are activated, their red flashes are visible from the inside and the outside of the passenger/crew doors through their related windows. At the FWD and AFT cargo compartment doors, the red flashes are visible from the outside only when the access panels 811CR and 677FR are open.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

Post SB 52-2056 For A/C ALL

A. Door Warning
During automatic flight phase mode, the door warning display is monitored and shown on the CRT. The LH CRT shows a warning display in the form of the relevant door title followed by "NOT CLOSED" in amber when the door is unlocked or open. The RH CRT shows the system display in the form of a synoptic of the door location together with a single word door title which comes on white when the door is closed and locked and amber when the door is unlocked or open. When the door warning display is out of flight phase mode and a monitored door is unlocked or opened, a single chime alarm is sounded in the cockpit and the MASTER CAUTION pushbutton switches on the captain main instrument panel 3 VU and first officer main instrument panel 5VU come on (amber). Selection of the DOOR P/BSW on the ECAM control panel will cause the door warning display to be shown on the CRT, thus enabling location of the open/unlocked door which will come on amber.
When the relevant door is properly closed and locked, the door synoptic comes on green and door the title comes on white on the RH CRT. On the LH CRT, the warning message (amber) disappears. The MASTER CAUTION push-button switches will remain amber until the CLEAR P/BSW on the ECAM control panel or either of the MASTER CAUTION pushbutton switches is pressed. The CRTs will then revert to normal flight phase mode displays.

B. Residual Pressure Warning
The residual pressure warning system monitors the residual pressure in the cabin and the FWD and AFT cargo compartments. A pressure switch in the electronics bay measures the residual cabin pressure. The pressure switch contains a membrane which activates the switch at a differential pressure of 0.0025 bar (0.0362 psi). When the pressure switch is activated, it pre-cipitates the red warning light installed in each door to flash when one or both engines are off and the escape slides are disarmed.

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

When the red warning lights are flashing, the legend "CABIN PRESSURE" is visible on the red surfaces of the warning lights. When the warning lights are dormant, the surfaces of the lights are white and the legends are not visible.
When the warning lights are activated, their red flashes are visible from the inside and the outside of the passenger/crew doors and the emergency exits through their related windows. At the FWD and AFT cargo compartment doors, the red flashes are visible from the outside only when the access panels 811CR and 677FR are open.

1. General

(Ref. Fig. 001)
(Ref. Fig. 002)

The door warning system monitors the "open/not locked" or "closed and locked" positions of the passenger/crew, emergency exit, cargo compartment, avionics compartment and lower access doors by means of warning switches. The condition of each switch is monitored by the Flight Warning Computer (FWC) of the Electronic Centralized Aircraft Monitoring (ECAM) system, and displays on the Cathode Ray Tubes (CRTs) and MASTER CAUTION pushbutton switches provide a visual indication to the crew of such position.
When a door is open or unlocked, the warning switch is open, the LH Warning Display CRT will show the relevant door title followed by "NOT CLOSED" in amber. The RH System Display CRT will show the affected door title and image in amber and the MASTER CAUTION pushbutton switch on the captain main instrument panel 3VU and first officer main instrument panel 5VU will also come on (amber). When the door is closed and locked, the warning switch is closed and the output of the FWCs will cause the Warning Display CRT annotation to disappear and the System Display CRT title to be shown in white and image to be shown in green. The MASTER CAUTION pushbutton switches will remain amber until all monitored doors are correctly closed and locked and the CLEAR P/BSW on the ECAM control panel or either of the MASTER CAUTION pushbutton switches is pressed.

2. Component Location

R **ON A/C 101-104,

(Ref. Fig. 003)

R **ON A/C 001-100, 105-200,

(Ref. Fig. 004)

**ON A/C ALL

(Ref. Fig. 005)
(Ref. Fig. 006)
(Ref. Fig. 007)

R **ON A/C 101-104,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
7WS	SWITCH-WARNING		221		52-71-11
8WS	SWITCH-WARNING		222		52-71-11

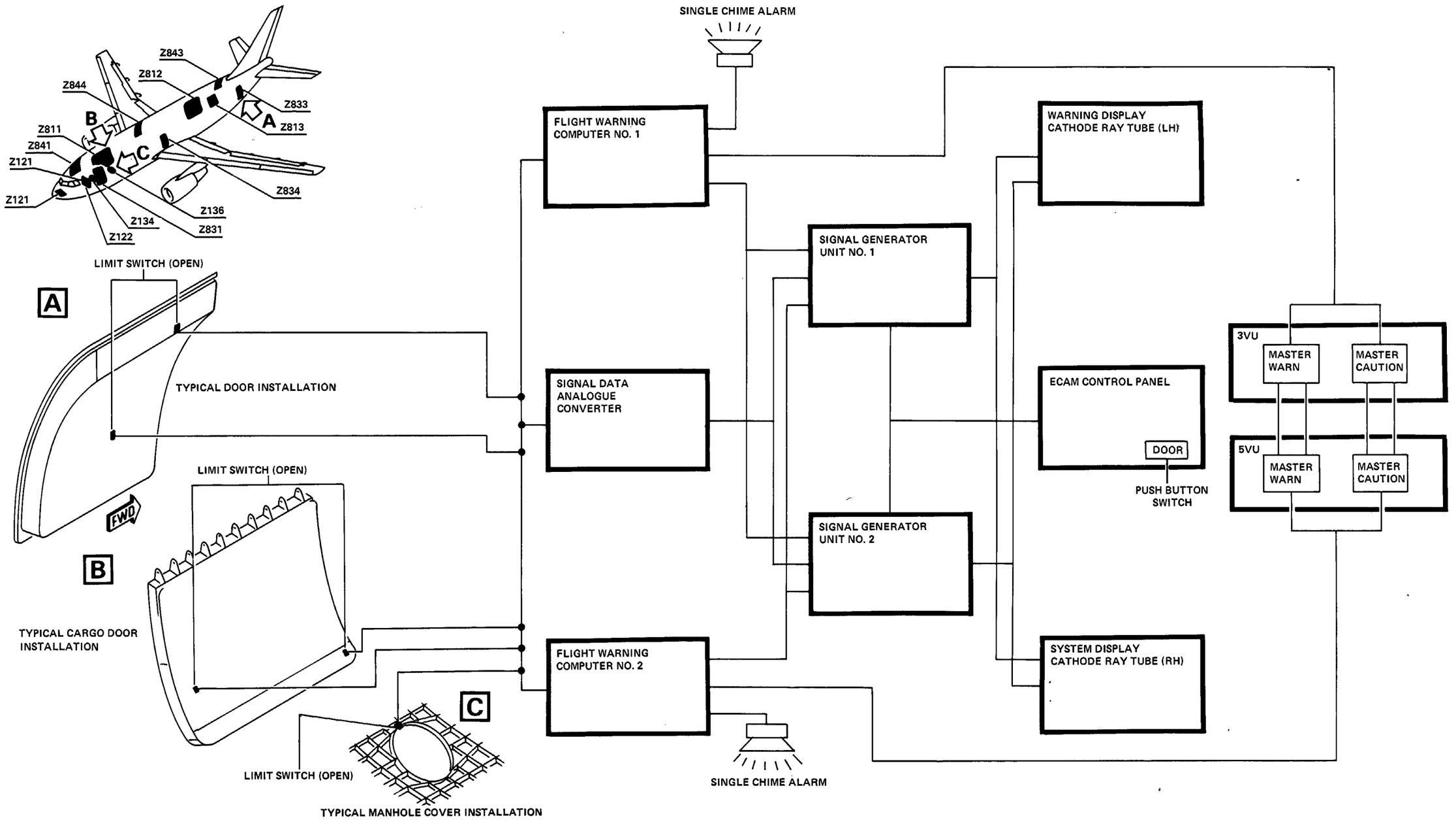
FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
9WS	SWITCH-WARNING		121		52-71-11
10WS	SWITCH-WARNING		134		52-71-11
11WS	SWITCH-WARNING		122		52-71-11
12WS	SWITCH-WARNING		136		52-71-11
14WS	SWITCH-WARNING		811		52-71-11
16WS	SWITCH-WARNING		811		52-71-11
25WS	SWITCH-WARNING		261		52-71-11
29WS	SWITCH-WARNING		122		52-71-11
31WS	SWITCH-WARNING		844		52-71-11
32WS	SWITCH-WARNING		812		52-71-11
33WS	SWITCH-WARNING		834		52-71-11
34WS	SWITCH-WARNING		812		52-71-11
36WS	SWITCH-WARNING		162		52-71-11
38WS	SWITCH-WARNING		262		52-71-11
42WS	SWITCH-WARNING		841		52-71-11
43WS	SWITCH-WARNING		831		52-71-11
46WS	SWITCH-WARNING		843		52-71-11
47WS	SWITCH-WARNING		833		52-71-11

R **ON A/C 001-100, 105-200,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
7WS	SWITCH-WARNING		221		52-71-11
8WS	SWITCH-WARNING		222		52-71-11
9WS	SWITCH-WARNING		121		52-71-11
10WS	SWITCH-WARNING		134		52-71-11
11WS	SWITCH-WARNING		122		52-71-11
12WS	SWITCH-WARNING		136		52-71-11
14WS	SWITCH-WARNING		811		52-71-11
16WS	SWITCH-WARNING		811		52-71-11
25WS	SWITCH-WARNING		261		52-71-11
29WS	SWITCH-WARNING		122		52-71-11
31WS	SWITCH-WARNING		844		52-71-11
32WS	SWITCH-WARNING		812		52-71-11
33WS	SWITCH-WARNING		834		52-71-11
34WS	SWITCH-WARNING		812		52-71-11
35WS	SWITCH/WARNING		844		52-71-11
36WS	SWITCH-WARNING		162		52-71-11
37WS	SWITCH-WARNING		834		52-71-11
38WS	SWITCH-WARNING		262		52-71-11
42WS	SWITCH-WARNING		841		52-71-11
43WS	SWITCH-WARNING		831		52-71-11

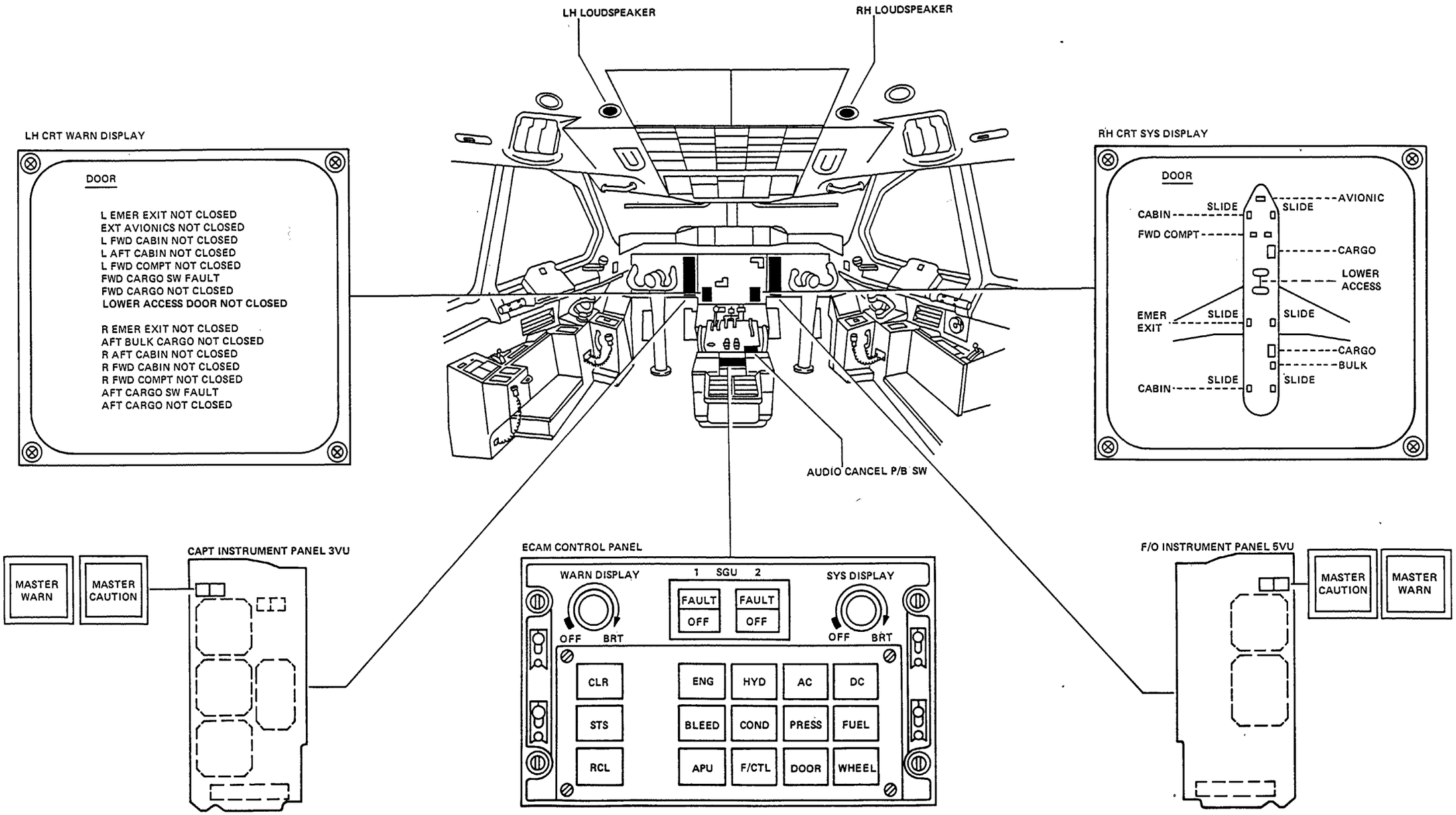
FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
46WS	SWITCH-WARNING		843		52-71-11
47WS	SWITCH-WARNING		833		52-71-11

INTENTIONALLY BLANK



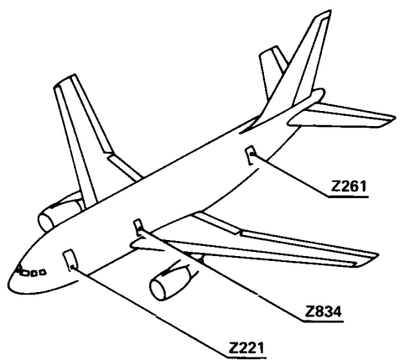
BM3 52 71 00 0 CAU0 17

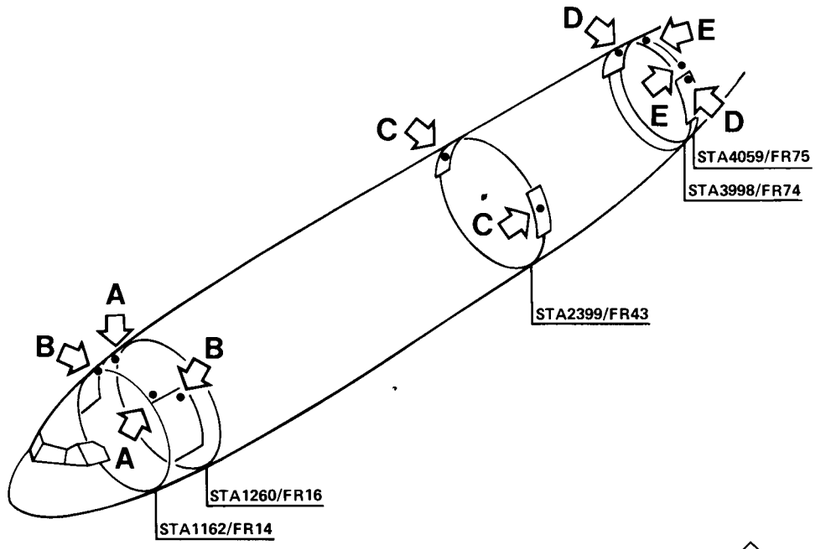
Door Warning System - Schematic
Figure 001

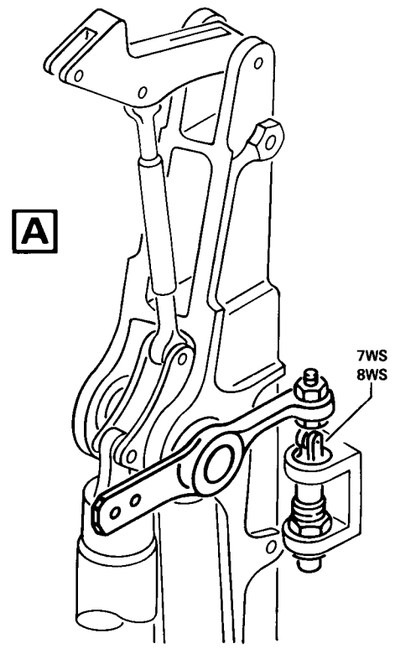


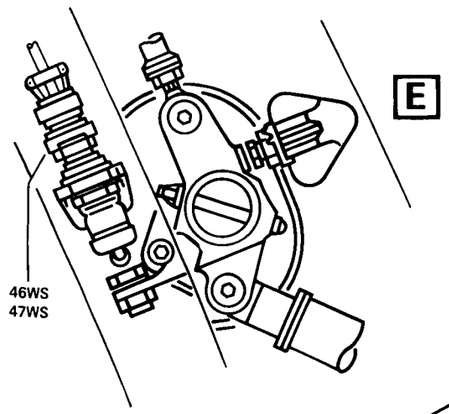
BM3 52 71 00 0 CCU0 17

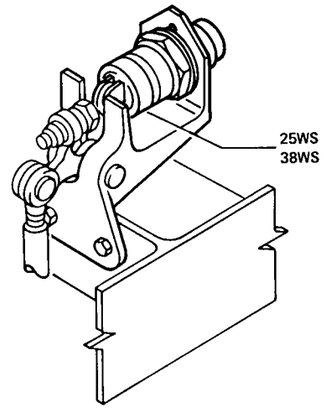
Door Warning System - Cockpit Displays
Figure 002

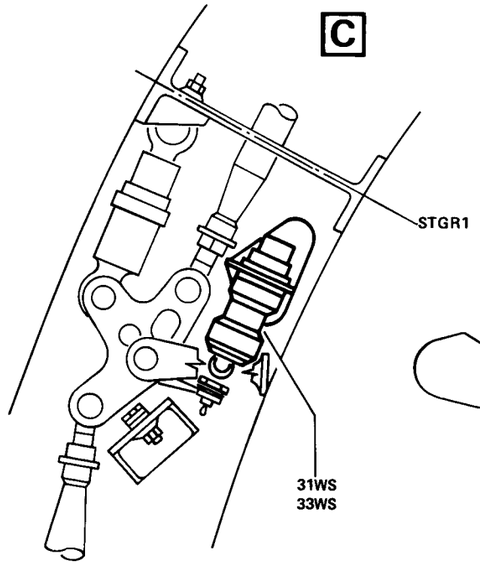


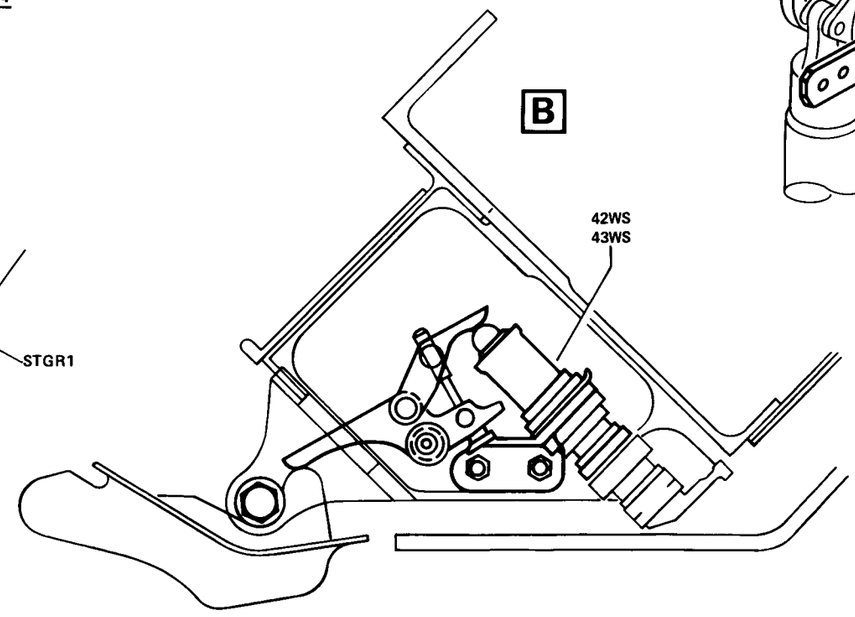






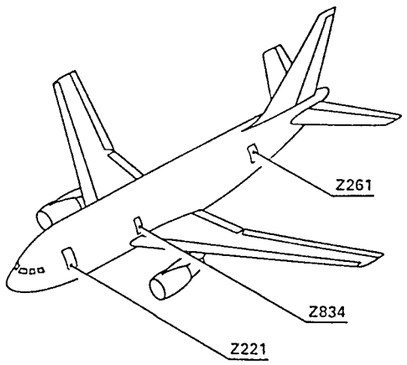


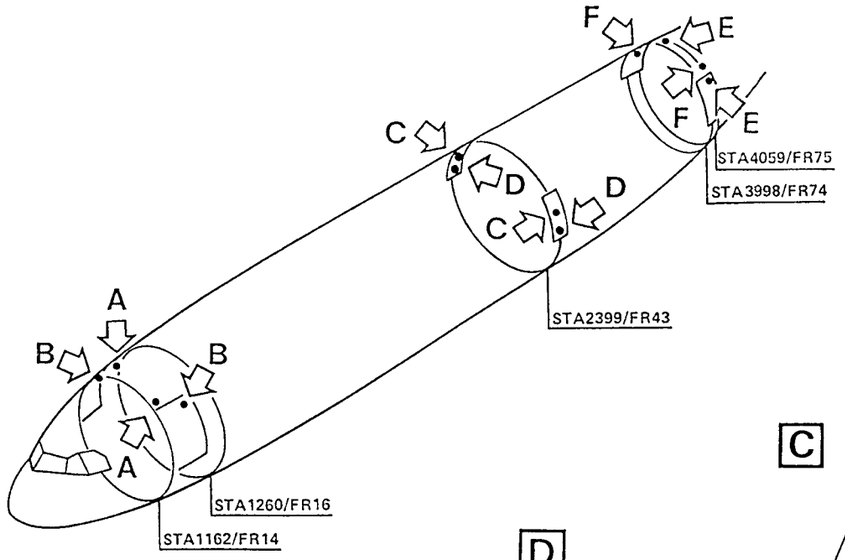


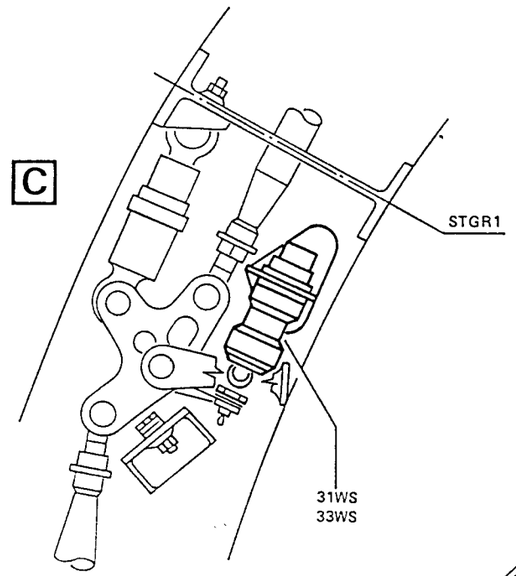


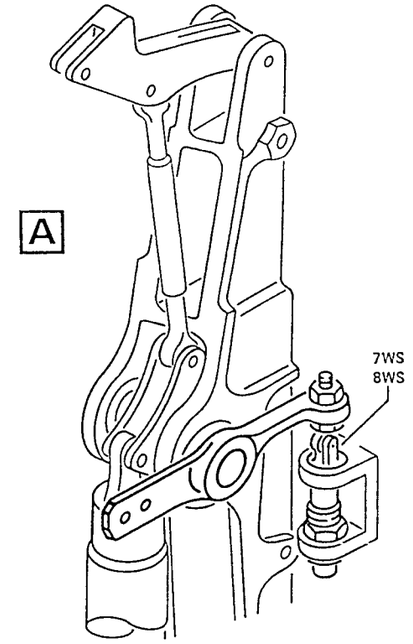
BM6 52 71 00 0 AEM001

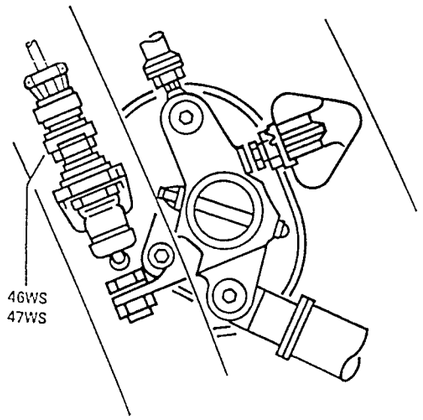
Door Warning System - Passenger/Crew -
Doors and Emergency Exits
Figure 003

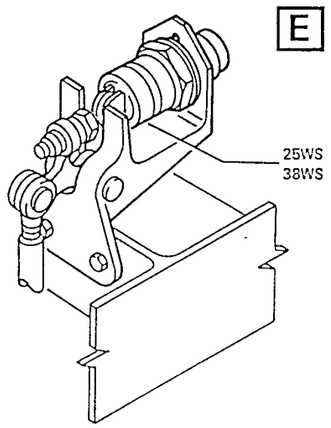


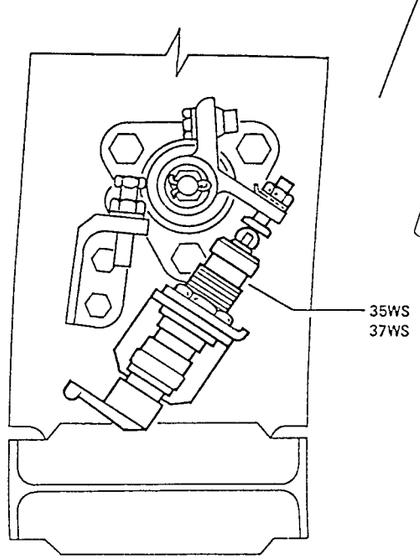


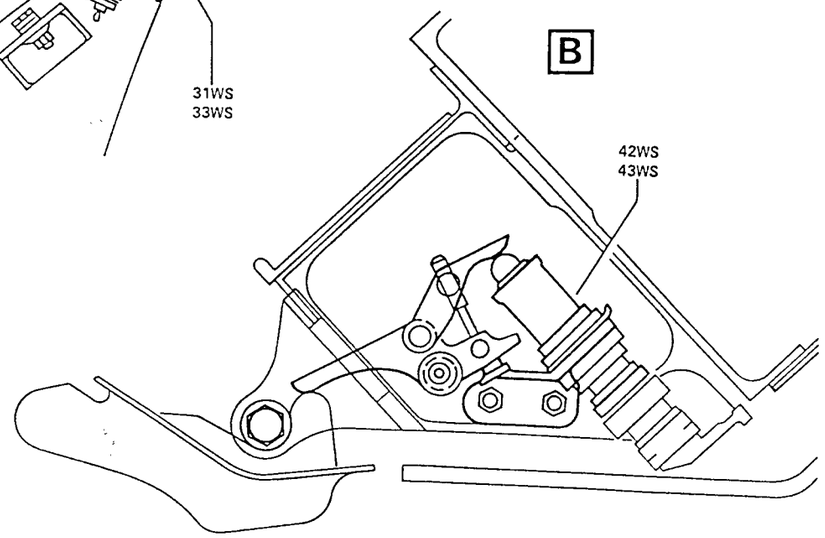






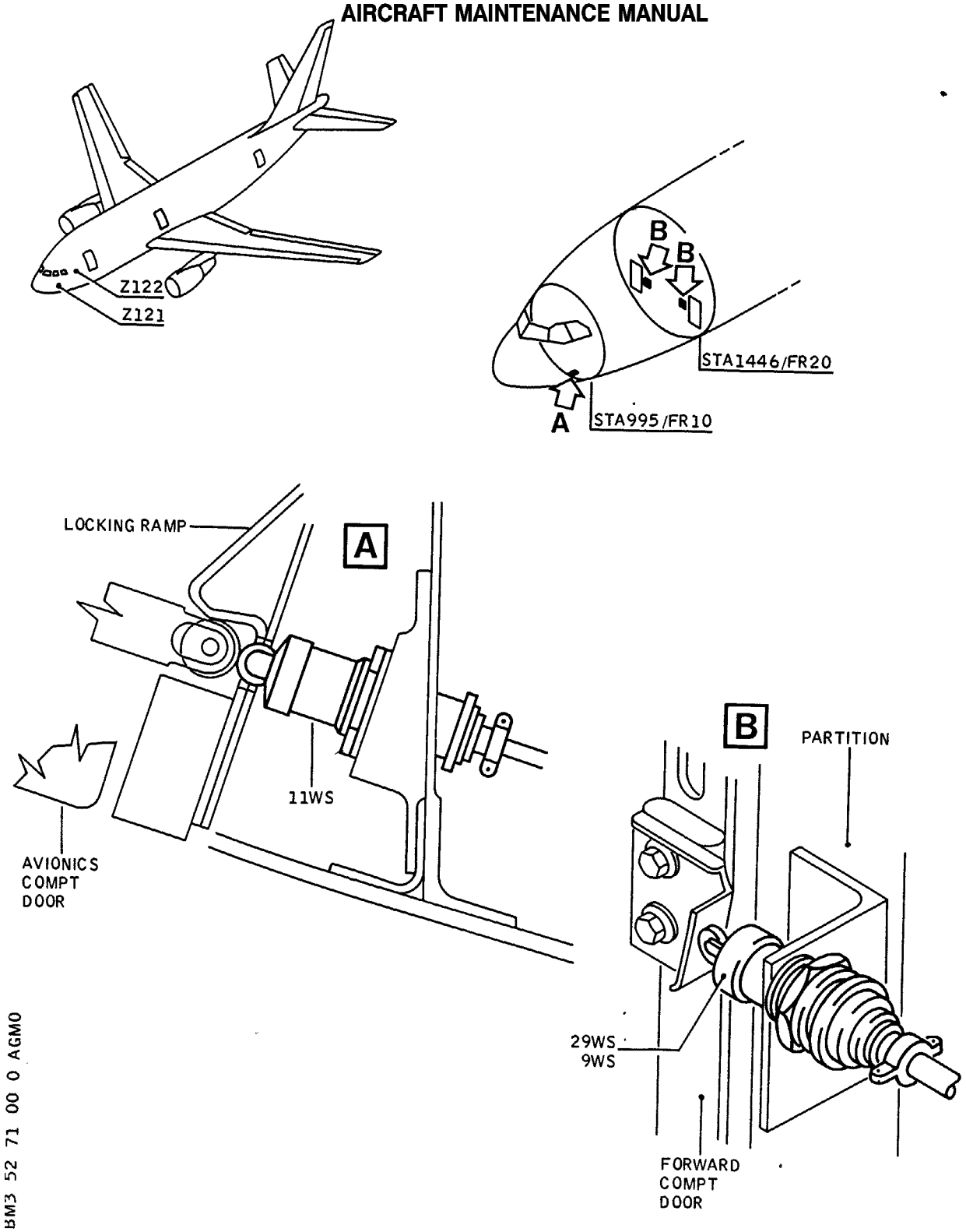




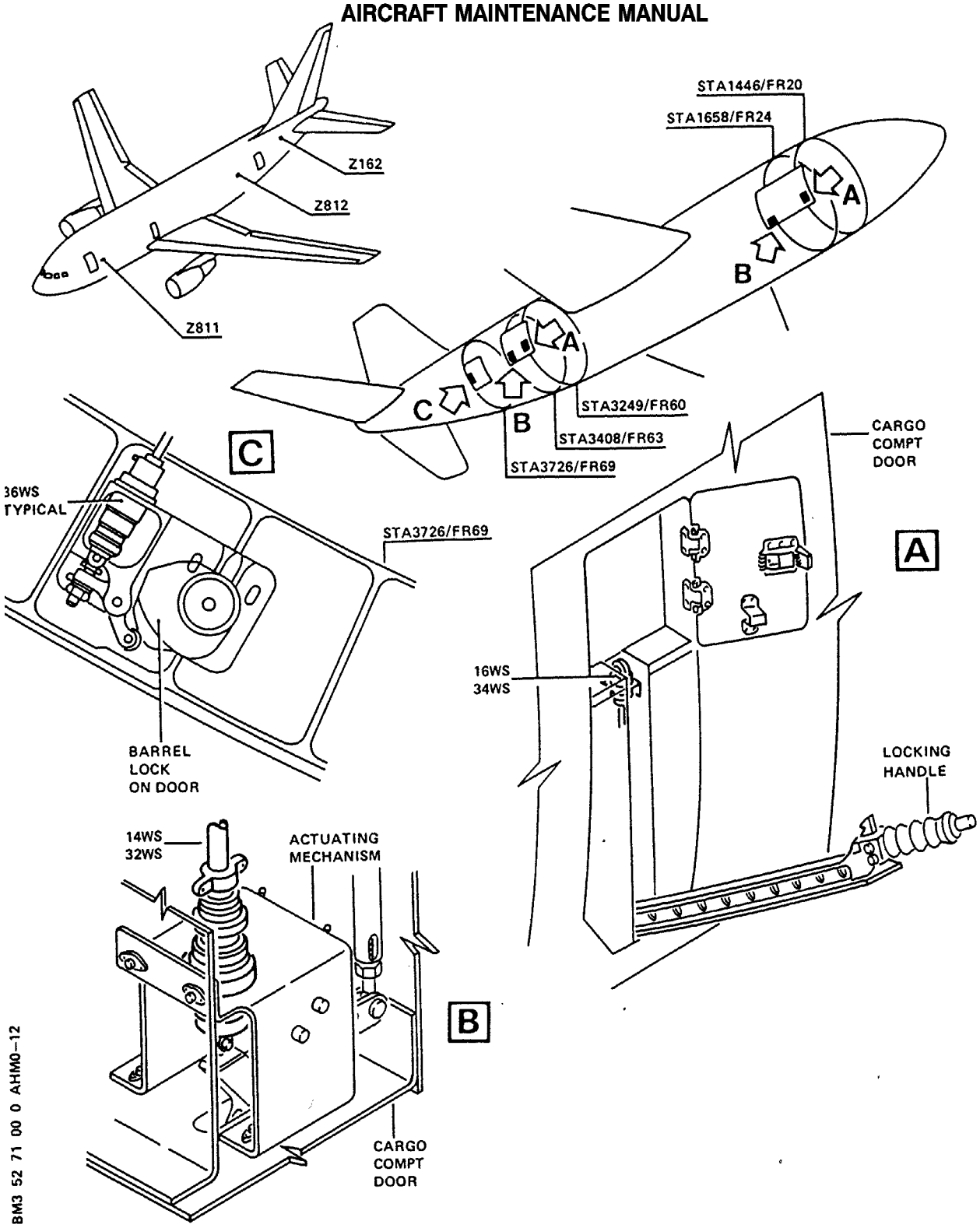


BMG 52 71 00 0 AEPO 00

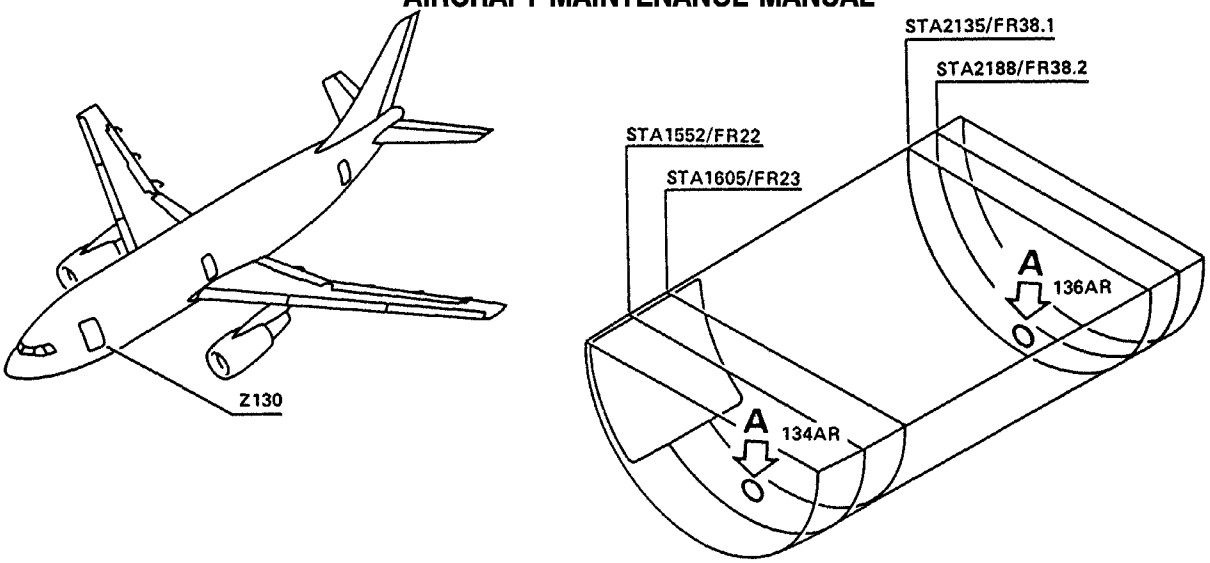
Door Warning System - Passenger/Crew - Doors and Emergency Exits.
Figure 004

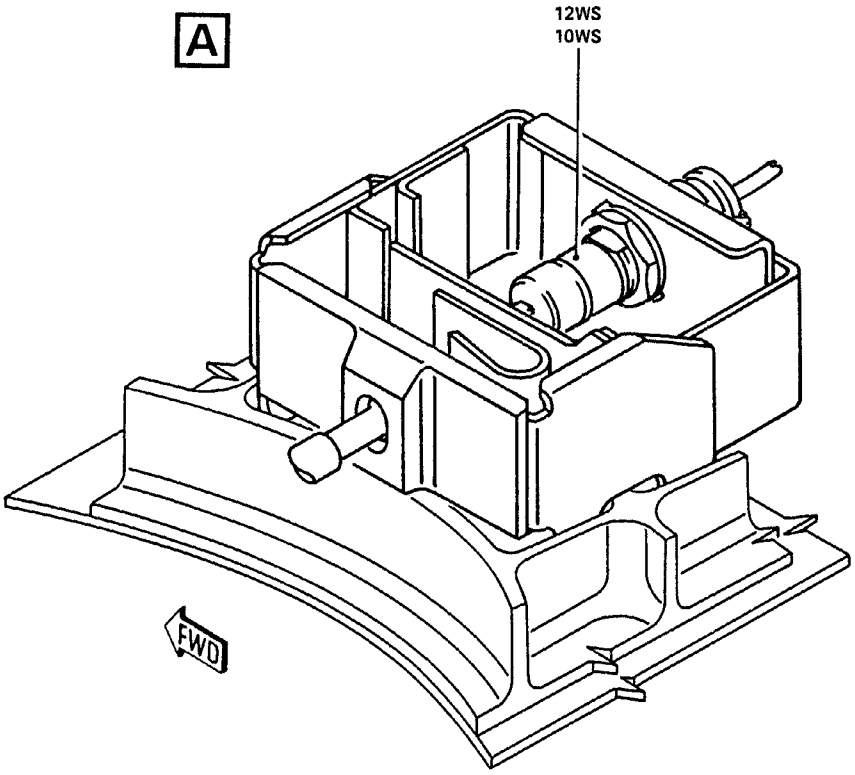


Door Warning System - Avionics Compartment Doors
Frame 20 and Avonics Compartment Access Door
Figure 005



Door Warning System - Cargo Compartment Doors
Figure 006





BM3 52 71 00 0 AJM0-15

Door Warning System - Air Conditioning Duct and
Accessory Compartment Doors
Figure 007

R **ON A/C 101-104,

3. Description

Warning switches installed in the doors and door frames monitor the door locking mechanism status (locked or unlocked) and door position (open or closed).
For the LH and RH passenger/crew doors the door mounted switch is operated by a lever installed on the locking shaft, the switch being loaded with the mechanism locked. Switches installed in the fuselage above the doors are operated by the door locking hooks and loaded when the doors are closed and locked.
Two switches are installed in both the FWD and AFT cargo compartment doors, one operated by the locking handle and the other by the door locking mechanism and a fuselage mounted stop.
The remaining doors monitored by the door warning system have one switch installed in each door surround which is activated by the door locking mechanism.
The presentation of the status of each door is displayed on the two CRTs of the ECAM system. The LH CRT shows the warning display detailing the door title which comes on amber when the appropriate door is unlocked or opened. The RH CRT shows the system display with a synoptic of the door location which comes on green and title comes on white when the relevant door is closed and locked, and synoptic and title amber when the door is unlocked or opened.
A pushbutton switch on the Captain main instrument Panel 3VU and first officer main instrument panel of the ECAM system, annotated MASTER CAUTION also comes on when any one or more of the monitored doors are open or unlocked and, simultaneously, a single chime aural warning sounds. The switch lights go off when all doors are closed and locked and the CLEAR P/BSW on the ECAM control panel or MASTER CAUTION pushbutton switch is pressed.

R **ON A/C 001-100, 105-200,

3. Description

Warning switches installed in the doors and door frames monitor the door locking mechanism status (locked or unlocked) and door position (open or closed).
For the LH and RH passenger/crew doors the door mounted switch is operated by a lever installed on the locking shaft, the switch being loaded with the mechanism locked. Switches installed in the fuselage above the doors are operated by the door locking hooks and loaded when the doors are closed and locked.
Two switches are installed in both the FWD and AFT cargo compartment doors, one operated by the locking handle and the other by the door locking mechanism and a fuselage mounted stop.

Two switches are installed in the LH and RH emergency exit doors, operated by the door locking mechanism.
The remaining doors monitored by the door warning system have one switch installed in each door surround which is activated by the door locking mechanism.
The presentation of the status of each door is displayed on the two CRTs of the ECAM system. The LH CRT shows the warning display detailing the door title which comes on amber when the appropriate door is unlocked or opened. The RH CRT shows the system display with a synoptic of the door location which comes on green and title comes on white when the relevant door is closed and locked, and synoptic and title amber when the door is unlocked or opened.
A pushbutton switch on the Captain main instrument Panel 3VU and first officer main instrument panel of the ECAM system, annotated MASTER CAUTION also comes on when any one or more of the monitored doors are open or unlocked and, simultaneously, a single chime aural warning sounds. The switch lights go off when all doors are closed and locked and the CLEAR P/BSW on the ECAM control panel or MASTER CAUTION pushbutton switch is pressed.

**ON A/C ALL

A. Images having double meaning
The following amber images on the CRT displays indicate both "door not locked" and "door not closed":

1.	CABIN	FWD Passenger/Crew Door, LH	(Zone 831)
2.	CABIN	AFT Passenger/Crew Door, LH	(Zone 833)
3.	CABIN	FWD Passenger/Crew Door, RH	(Zone 841)
4.	CABIN	AFT Passenger/Crew Door, RH	(Zone 843)
5.	CARGO	FWD Cargo Compartment Door	(Zone 811)
6.	CARGO	AFT Cargo Compartment Door	(Zone 812)

B. Images having a single meaning
The following amber images on the CRT displays indicate "door not closed" (or "access door not closed"):

1.	FWD COMPT	Electronics/Electrical Compartment Door, LH	(Zone 121)
2.	FWD COMPT	Electronics/Electrical Compartment Door, RH	(Zone 122)
3.	AVIONIC	Avionics Compartment Door	(Zone 122)
4.	EMER EXIT	Passenger Compartment Emergency Exit, LH	(Zone 834)
5.	EMER EXIT	Passenger Compartment Emergency Exit, RH	(Zone 844)
6.	BULK	Bulk Cargo Compartment Door	(Zone 162)
7.	LOWER ACCESS	Air Conditioning Duct and Accessory Compartment Door	(Zone 134 or Zone 136)

4. Component Description

R **ON A/C 101-104,

A. Warning Switch (7WS, 8WS, 9WS, 10WS, 11WS, 12WS, 14WS, 16WS, 25WS, 29WS, 31WS, 32WS, 33WS, 34WS, 36WS, 38WS, 42WS, 43WS, 46WS,

47WS).

R **ON A/C 001-100, 105-200,

A. Warning Switch (7WS, 8WS, 9WS, 10WS, 11WS, 12WS, 14WS, 16WS, 25WS, 29WS, 31WS, 32WS, 33WS, 34WS, 35WS, 36WS, 37WS, 38WS, 42WS, 43WS, 46WS, 47WS).

**ON A/C ALL

Installed in the doors and door frames to monitor the door locking mechanism status and the door position. Closed when the door is correctly closed and locked.

5. Operation

R **ON A/C 101-104,

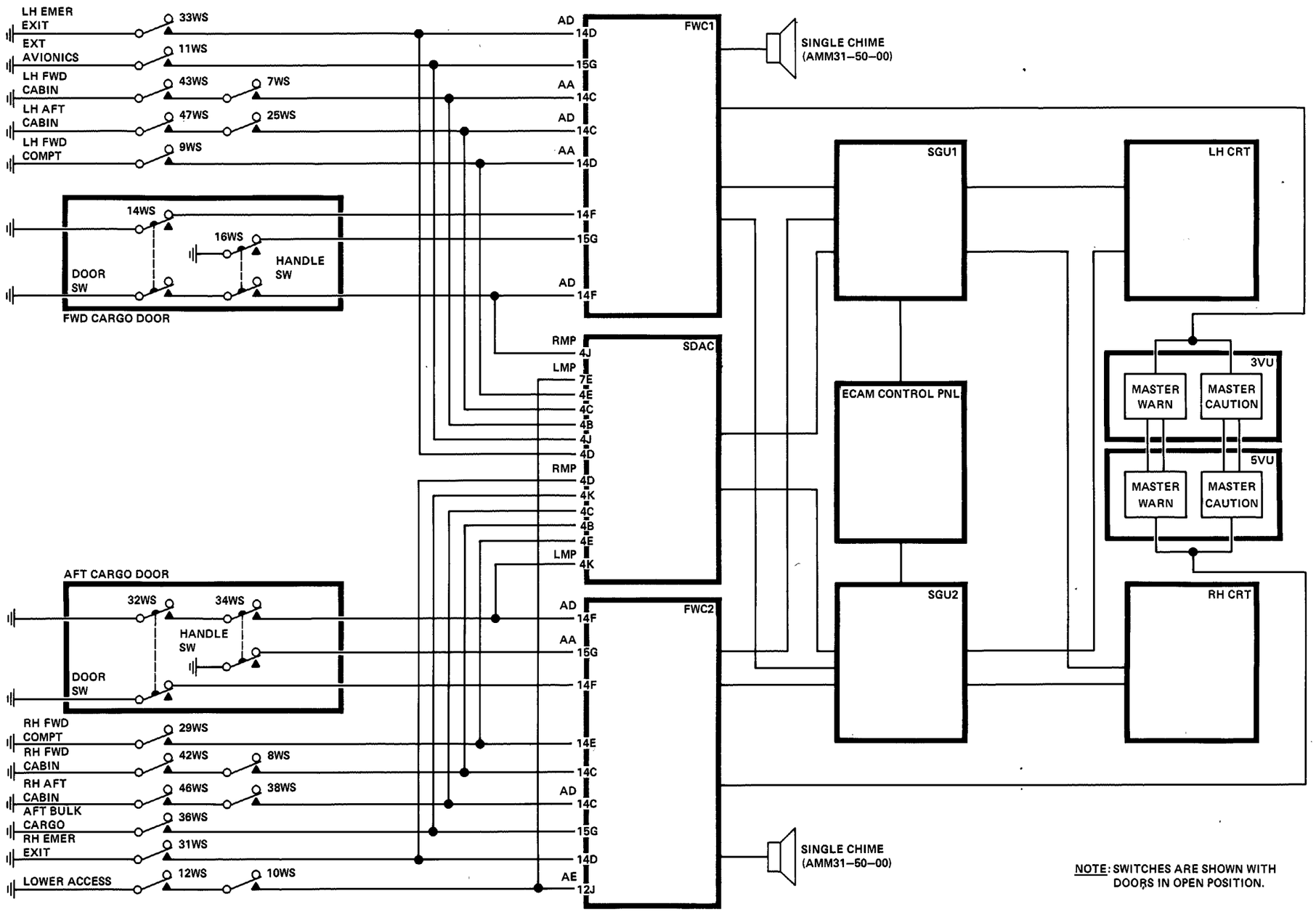
(Ref. Fig. 008)

R **ON A/C 001-100, 105-200,

(Ref. Fig. 009)

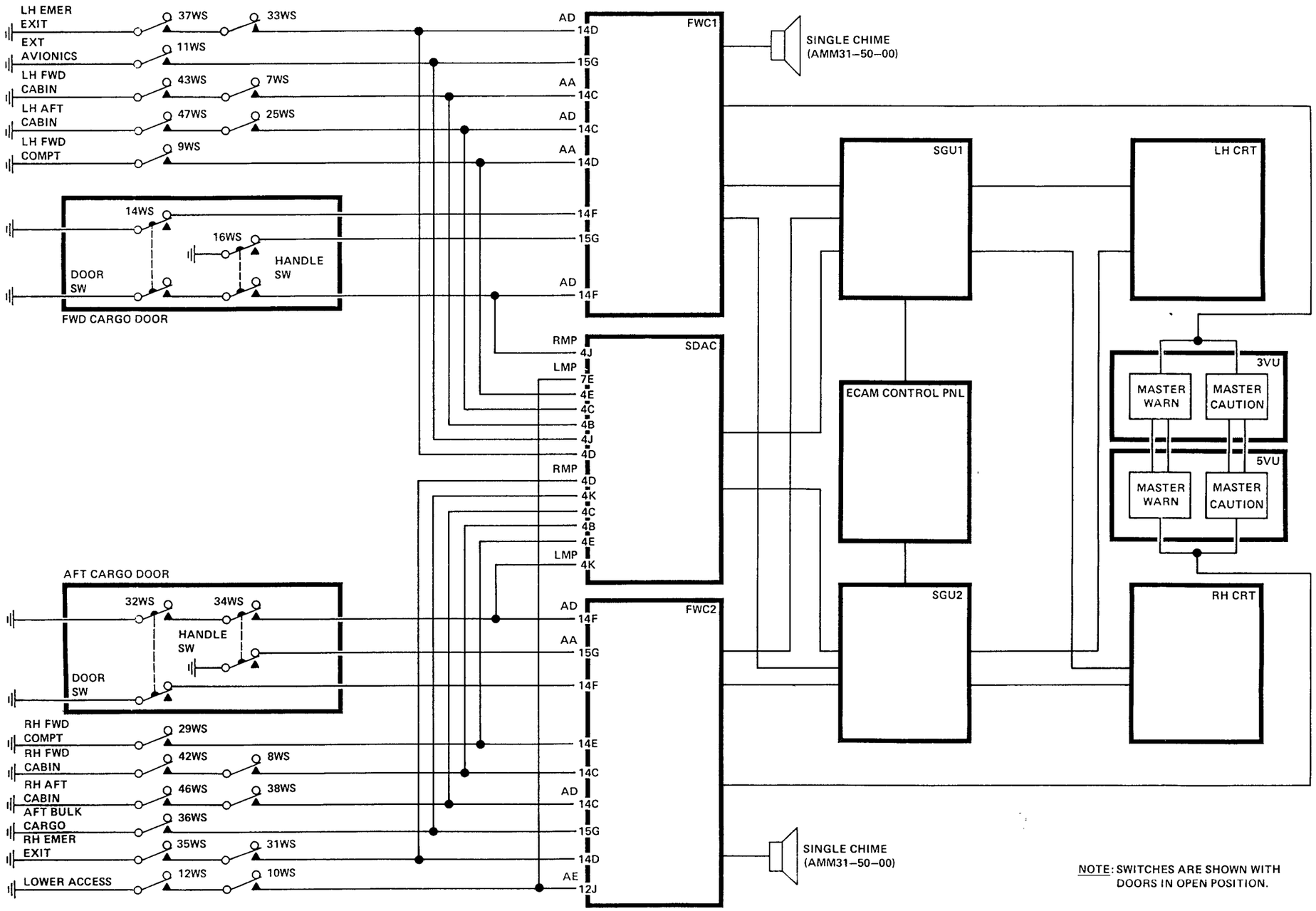
**ON A/C ALL

The door warning switches are monitored by the Flight Warning Computers (FWC1, FWC2) and the System Data Analogue Converter (SDAC) of the ECAM system. Outputs from both the FWCs and the SDAC are routed to the Symbol Generator Units (SGU1 and SGU2) which drive the CRTs on which are displayed automatically, during automatic flight phase mode or manually by selection of the DOOR P/BSW on the ECAM control panel, the door warning and system displays.
Outputs from the FWCs are also monitored by the MASTER CAUTION pushbutton switches and the central warning system.
During automatic flight phase mode the Door Warning System is displayed on the CRTs. The condition of all associated warning switches is monitored by the FWCs and when one is unloaded, i.e. door unlocked or door opened, the ground connection of the appropriate warning switch is broken. This results in the corresponding output of the FWC going to logic 1 and the output of the SGU to drive the CRTs and cause the relevant door title and door image to come on amber. Closing or locking the appropriate door re-connects the ground connection of the warning switch resulting in the output of the FWC going to logic 0 and the CRT door title to come on white and the door image to come on green.



BM3 52 71 00 0 CKU0 17

Door Warning System - Electrical Schematic
Figure 008



BM6 52 71 00 0 CKWO 00

Door Warning System - Electrical Schematic
Figure 009

When a monitored door is unlocked or opened and the door warning displays are not being shown on the CRTs, the MASTER CAUTION pushbutton switch on the captain main instrument panel 3VU and first offizer main instrument panel 5VU will come on amber and the single chime aural warning will sound.
Selection of the door warning display on the CRTs can be manually attained by pressing the DOOR P/BSW on the ECAM control panel and the title and image of the relevant door will be displayed in amber on the RH CRT and the affected door title followed by 'NOT CLOSED' in amber on the LH CRT.
When the door is correctly closed and locked, the door title will come on white and the door image comes on green on the RH CRT and on the LH CRT door title disappear.
Pressing the CLEAR P/BSW on the ECAM control panel or MASTER CAUTION pushbutton switch will cause the lights to go off and the CRT displays to revert to the automatic flight phase mode.

6. Interfaces

Signal directions

FROM	TO	CHAPTER REF.
Warning switches	FWC1/FWC2	31-53-00
Warning switches	SDAC	31-55-00

1. Operational Test

A. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedure - 24-41-00, P. Block 301	AC External Power Control

B. Procedure

WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.

(1)Job set-up

(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(b)Make certain that electronics racks ventilation is correct.

(c)Make certain that overhead panel circuit breakers are closed, particularly those associated with ECAM.

(d)On center pedestal, on ECAM control panel
- using LEFT and RIGHT DISPLAY knobs adjust the brightness on L and R ECAM display units.

(2)Test

(Ref. Fig. 501)

R Monitoring is provided for the opening or closing of the doors. Each door is shown on an aircraft symbol on the DOOR system page.

ACTION	RESULT
1. On center pedestal, on ECAM control panel - press DOOR pushbutton switch to select the DOOR page - press CLR pushbutton switch	The R ECAM display unit shows the DOOR page
2. Perform a turn around inspection to check whether the doors monitored by the ECAM system are open or closed	On the ECAM display unit check that : - each closed door symbol is shown in green and the associated designation in white - each open door symbol and associated designation are shown in amber.
3. Open one of the closed doors WARNING : IF THERE IS NO ACCESS PLATFORM, INSTALL SAFETY STRAP AT DOOR OPENING.	- on the R ECAM display unit, the designation of the corresponding door as well as the corresponding symbol turn amber
4. On panel 47OVU - press INHIB OVRD pushbutton switch and hold on till all effects are	- check that a single chime is heard - on CAPT and F/O main instrument

ACTION	RESULT
checked	panel 3VU and 5VU, MASTER CAUTION lights ON. - on L ECAM display unit check that the following message appears : DOOR EXT AVIONIC NOT CLOSED or L (R) FWD CABIN or L (R) AFT CABIN or FWD CARGO or AFT CARGO or L (R) FWD COMPT or BULK CARGO or L (R) EMER EXIT or LOWER ACCESS.
- release INHIB OVRD pushbutton switch	

(3)Close-up
(a)De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Restore system and aircraft to normal operating condition.

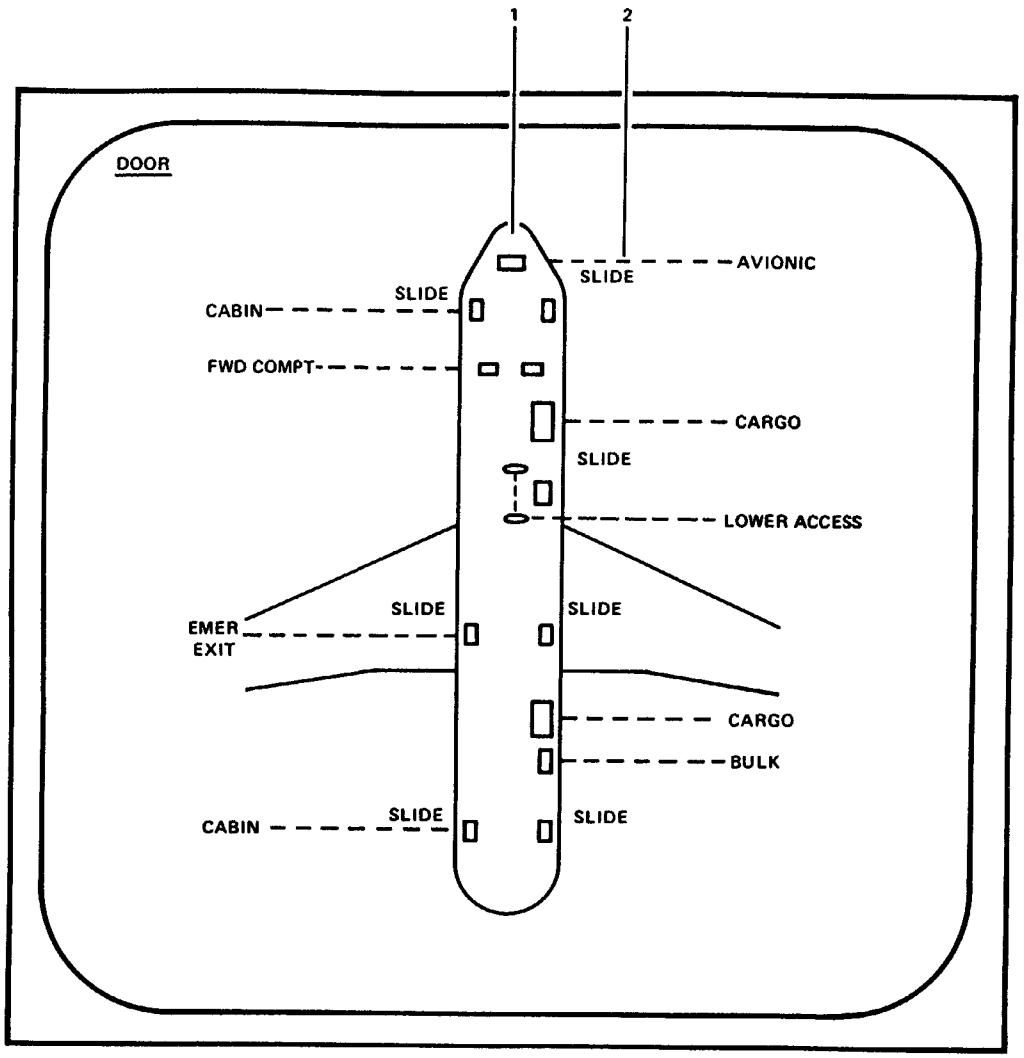
2. Functional Test

A. Reason for the Job
The purpose of this test is to check operation of door switches.

B. Equipment and Materials

ITEM	DESIGNATION
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 52-33-00, P. Block 1	Cargo Compartment Door Opening

C. Procedure
WARNING : BEFORE POWER IS SUPPLIED TO THE AIRCRAFT, MAKE CERTAIN THAT ELECTRICAL CIRCUITS UPON WHICH WORK IS IN PROGRESS ARE ISOLATED.
(1)Job set-up
(a)Energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b)Make certain that electronics racks ventilation is correct.
(c)Make certain that overhead panel circuit breakers are closed, particularly those associated with ECAM.
(d)On center pedestal, on ECAM control panel
- using LEFT and RIGHT DISPLAY knobs adjust the brightness on L and R ECAM display units.
(2)Test



1 (G) ..... (W) AVIONIC (W) : DOOR LOCKED

(A) ..... (A) AVIONIC (A) : DOOR NOT LOCKED

2 SLIDE (W):CABIN SLIDE ARM

BM5 52 71 00 5 ACMO – 12

Door System Page
Figure 501

WARNING : EVERY TIME A DOOR IS OPEN, INSTALL A SAFETY STRAP IF NO ACCESS PLATFORM IS PROVIDED.

ACTION	RESULT
1. Close the twelve doors and emergency exits.	
WARNING : MAKE CERTAIN THAT A SIDE WINDOW IS OPEN IN ORDER NOT TO PRESSURIZE THE AIRCRAFT WHEN AVIONICS VENTILATION SYSTEM OPERATES AND ALL DOORS ARE CLOSED.	
2. On center pedestal, on ECAM control panel - press DOOR pushbutton switch to select the DOOR page, then press CLR pushbutton switch	On panel 8VU, the R ECAM display unit shows the DOOR page. The twelve symbols standing for the twelve doors are green. The door designations are white.
3. Open the exterior avionics compartment door	On the R ECAM display unit, the word AVIONIC turns amber ; the relevant rectangular symbol also turns amber.
4. On panel 47OVU - press INHIB OVRD pushbutton switch and hold on till all effets are checked	Check that a single chime is heard. On CAPT and F/O main instrument panels 3VU and 5VU, MASTER CAUTION lights ON. On L ECAM display unit check that the following message appears : DOOR EXT AVIONICS NOT CLOSED.
5. Release INHIB OVRD pushbutton switch.	Warnings are cleared.
6. Close the exterior avionics compartment door and open the left forward passenger/crew door	On the R ECAM display unit the word AVIONIC turns white while CABIN turns amber, as well as the associated door symbol.
7. Press INHIB OVRD pushbutton switch.	A single chime is heard. On CAPT and F/O main instrument panels 3VU and 5VU, MASTER CAUTION lights ON. On L ECAM display unit the following warning comes on : DOOR L FWD CABIN NOT CLOSED (amber).
8. Release INHIB OVRD pushbutton	Warnings are cleared.

ACTION	RESULT
switch.	
9. Close the left forward passenger/ crew door and open the right forward passenger/crew door	On the R ECAM display unit, the left door symbol turns green while the right door symbol turns amber.
10. Press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights **ON.** On L ECAM display unit the following message appears : **DOOR** **R FWD CABIN NOT CLOSED.**
11. Release **INHIB OVRD** pushbutton switch. On **ECAM** control panel press **CLR** pushbutton switch	
12. Close the right passenger/crew door and open the left forward avionics compartment door	On the **R ECAM** display unit, the right **CABIN** door symbol turns green, while the **FWD COMPT** words turn amber as well as the left associated symbol.
13. Press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights **ON.** On L ECAM display unit the following message appears : **DOOR** **L FWD COMPT NOT CLOSED.**
14. Release **INHIB OVRD** pushbutton switch.	Warnings are cleared.
15. Close the left avionics compartment door and open the right one	On the L ECAM display unit, the left symbol turns green, and the right one turns amber.
16. Press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights **ON.** On L ECAM display unit the following message appears : **DOOR**

ACTION	RESULT
	R FWD COMPT NOT CLOSED.
17. Release **INHIB OVRD** pushbutton switch.	Warnings are cleared.
18. Close the right avionics compartment door and open the forward cargo compartment door (Ref. 52-33-00, P. Block 1)	On the **R ECAM** display unit, the **R FWD COMPT** door symbol turns green and the words **FWD COMPT** turn white. The word **CARGO** and the door symbol turn amber.
19. Press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights **ON.** On **L ECAM** display unit the following message appears : **DOOR** **FWD CARGO NOT CLOSED.**
20. Release **INHIB OVRD** pushbutton switch.	Warnings are cleared.
21. Close the forward cargo compartment door and open the left emergency exit	On the **R ECAM** display unit, the word **CARGO** turns white and the cargo door symbol turns green. The words **EMER EXIT** turn amber, as well as the emergency exit left symbol.
22. Press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights **ON.** On **L ECAM** display unit the following message appears : **DOOR** **L EMER EXIT NOT CLOSED.**
23. Release **INHIB OVRD** pushbutton	Warnings are cleared.
24. Close the left emergency exit and open the right one	On the **R ECAM** display unit the left door symbol turns green and the right door symbol turns amber.
25. Press **INHIB OVRD** pushbutton switch	A single chime is heard.

ACTION	RESULT
	On CAPT and F/O main instrument panels 3VU and 5VU, MASTER CAUTION lights ON. On L ECAM display unit the following message appears : DOOR R EMER EXIT NOT CLOSED.
26. Release INHIB OVRD pushbutton switch.	Warnings are cleared.
27. Close the right emergency exit and open the aft cargo compartment door (Ref. 52-33-00, P. Block 1)	On the R ECAM display unit the words EMER EXIT turn white and the right emergency exit symbol turns green. The word CARGO and the cargo door symbol turn amber.
28. Press INHIB OVRD pushbutton switch	A single chime is heard. On CAPT and F/O main instrument panels 3VU and 5VU, MASTER CAUTION lights ON. On L ECAM display unit the following message appears : DOOR AFT CARGO NOT CLOSED.
29. Release INHIB OVRD pushbutton switch.	Warnings are cleared.
30. Close the aft cargo compartment door and open the bulk cargo door	On the R ECAM display unit the word CARGO turns white and the cargo door symbol turns green. The word BULK turns amber as well as the door symbol.
31. Press INHIB OVRD pushbutton switch	A single chime is heard. On CAPT and F/O main instrument panels 3VU and 5VU, MASTER CAUTION lights ON. On L ECAM display unit the following message appears : DOOR BULK CARGO NOT CLOSED.
32. Release INHIB OVRD pushbutton switch.	Warnings are cleared.

ACTION	RESULT
33. Close bulk cargo door and open left aft passenger /crew door	On the R ECAM display unit, the word **BULK** turns white, the bulk cargo door symbol turns green, and the word **CABIN** and associated door symbol turn amber.
34. Press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights **ON.** On L ECAM display unit the following message appears : **DOOR** **L AFT CABIN NOT CLOSED.**
35. Release **INHIB OVRD** pushbutton switch.	Warnings are cleared.
36. Close the left aft passenger/crew door and open the right one	On the **R ECAM** display unit the left door symbol turns green and the right door symbol turns amber.
37. Press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights **ON.** On L ECAM display unit the following message appears : **DOOR** **R AFT CABIN NOT CLOSED.**
38. Release **INHIB OVRD** pushbutton switch	The previous message disappears.
R 39. Close the right aft passenger/crew door	On the **R ECAM** display unit the word **CABIN** turns white and the right door symbol turns green.
R 40. Open access door **134AR** or **136AR**	On **R ECAM** display unit the word **LOWER ACCESS** turns amber as well as both door symbols.
R On maintenance panel press **INHIB OVRD** pushbutton switch	A single chime is heard. On **CAPT** and **F/O** main instrument panels **3VU** and **5VU, MASTER CAUTION** lights flash. On L ECAM display unit the following message appears : **DOOR**

ACTION	RESULT
	R LOWER ACCESS DOOR NOT CLOSED.
R 41. Close access door previously opened	The message on ECAM disappears.

(3) Close-up
(a) De-energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(b) Restore system and aircraft to normal operating condition.

3. System Test
(Refer to Functional Test)

DOOR WARNING SWITCHES - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00, P. BLOCK 301 AND 52-23-00, P. BLOCK 301).

1. Reason for the Job

Removal/installation of the door warning system limit switches associated with the following doors:

- FWD and AFT Passenger/Crew Doors
- Emergency Exits
- FWD and AFT Cargo Compartment Doors
- BULK Cargo Compartment Door
- Avionics Compartment Doors Frame 20 (131AZ, 132AZ)
- Avionics Compartment Access Door (121BL)
- Lower Access Doors (134AR, 136AR)

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.50 to 5 m (8 to 16 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Cotter Pin, Qty. 2
D.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.03 in.)
E. Material No. 08-007	Bonding and Adhesive Compounds (Ref. 20-31-00)
F. Material No. 09-001	Sealants (Ref. 20-31-00)
G. Material No. 09-011	Sealants (Ref. 20-31-00)

Referenced Procedures

- 25-23-41, P. Block 401	Door Frame Lining
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-13, P. Block 401	Lining and Insulation
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-71-11, P. Block 501	Door Warning Switches

3. Procedure

A. Job-Set-Up

(1)Position access platform.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00, P. BLOCK 301 AND 52-23-00, P. BLOCK 301).

(2)Safety emergency escape slide, door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301, and 52-23-00, P. Block 301).

(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
21VU	ECAM/CTL PNL LT	12WT	108/B01
21VU	ECAM/DISPLAY UNIT/L	7WT	108/B02
21VU	ECAM/DISPLAY UNIT/R	8WT	108/B03
21VU	ECAM/SGU/1	11WT1	108/B04
21VU	ECAM/SGU/2	11WT2	108/B05
21VU	ECAM/FLT WARN MONITOR	4WW	108/B06
21VU	ECAM/FLT WARN MONITOR	24WW	108/B07
21VU	ECAM/FWC 1	7WW	108/B08
21VU	ECAM/SDAC/26 V AC/NORM/1	3WV1	109/A02
21VU	ECAM/SDAC/26 V AC/NORM/2	3WV2	109/A03
21VU	ECAM/SDAC/26 V AC/ESS	5WV	109/A04
21VU	ECAM/SDAC/PWR SUPPLY	6WV	109/A05
21VU	ECAM/FWC 2	32WW	109/A08
22VU	SLIDES/HORN	2WN	205/E22
22VU	SLIDES/ARM ! WARN	1WN	205/E23

(Ref. Fig. 401)
(Ref. Fig. 402)
(Ref. Fig. 403)
(Ref. Fig. 404)

R **ON A/C 001-100, 105-200,

(Ref. Fig. 405)

R **ON A/C 101-104,

B. Removal

CAUTION : WARNING SWITCHES FOR PASSENGER/CREW DOORS AND EMERGENCY EXITS WS CIRCUIT ARE CODED. FOR WS CIRCUIT USE ONLY THIS TYPE OF WARNING SWITCHES.

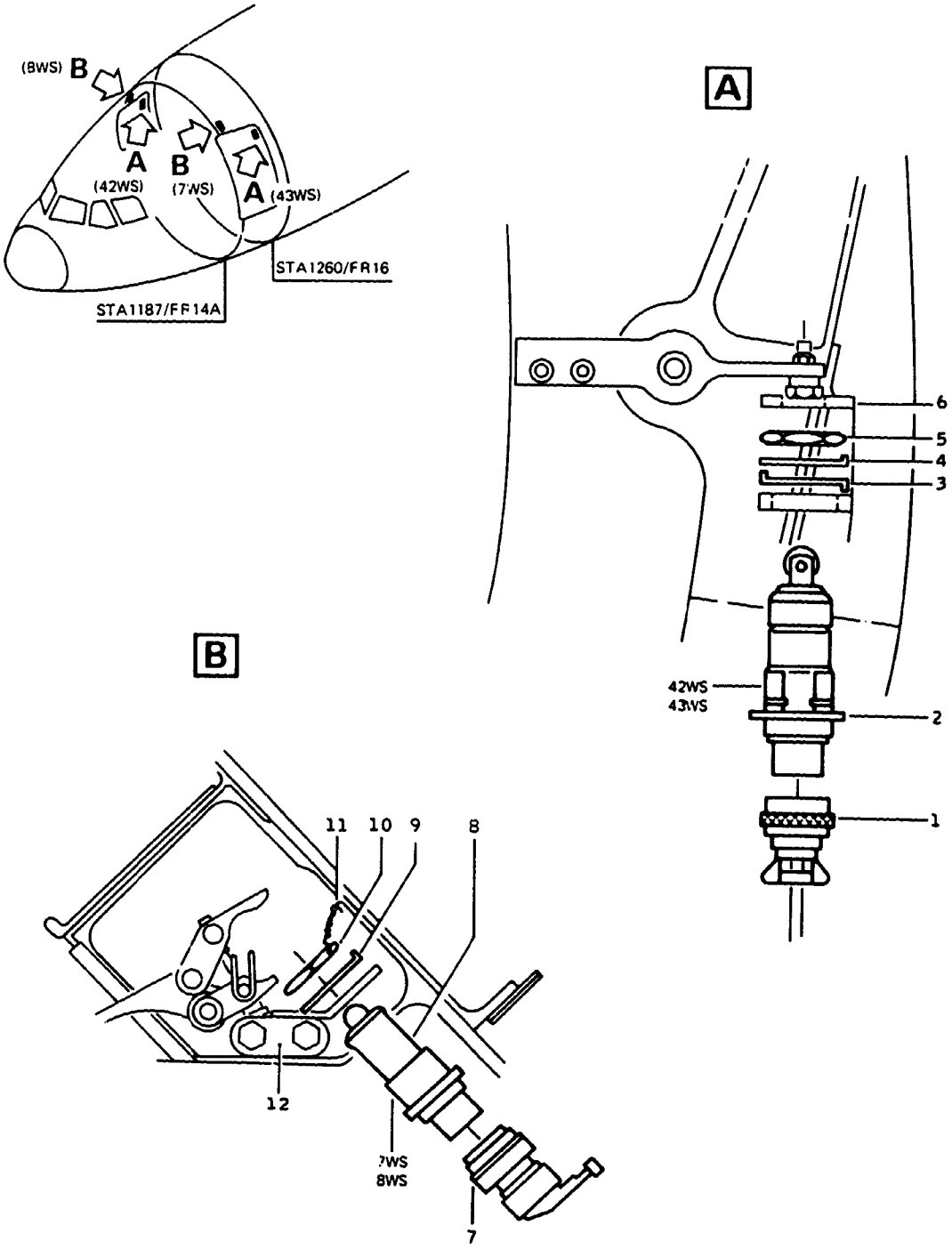
(1)FWD Passenger/Crew Doors (Ref. Fig. 401)

(a)Warning Switches 7WS and 8WS

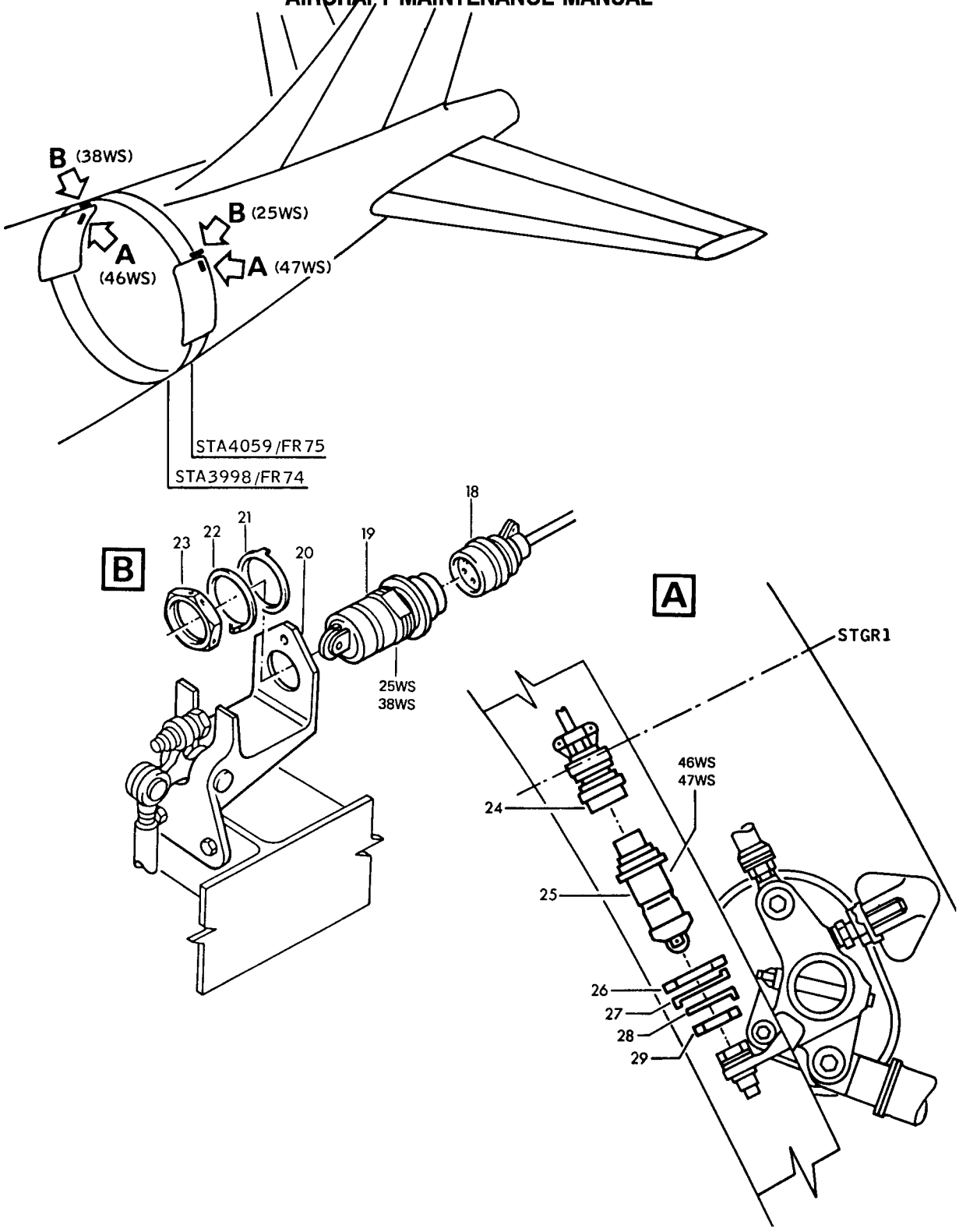
1 Remove access cover (Ref. 25-23-41, P. Block 401).
2 Unlock door.
3 Cut and remove lockwire (11).
4 Disconnect electrical connector (7) from switch (8).
5 Remove nut (10), washer (9) and switch (8).
6 Remove switch (8) from mounting bracket (12).

(b)Warning Switches 42WS and 43WS

1 Remove door upper lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (1) from switch (2).
4 Remove nut (5), lock washer (4) and locating washer (3).
5 Remove switch (2) from bracket (6).



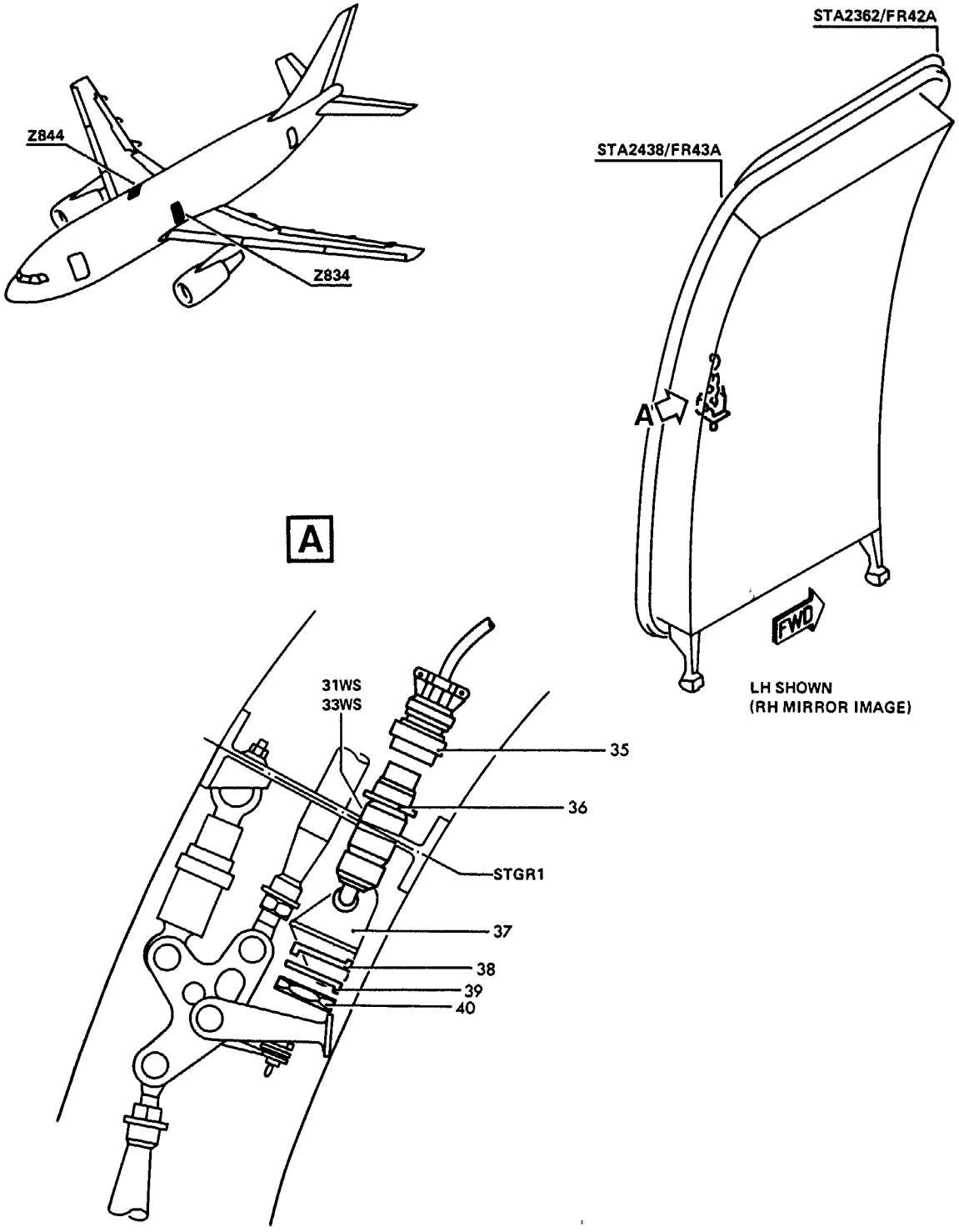
FWD Passenger/Crew Doors - Warning Switches (7WS, 8WS)
Figure 401



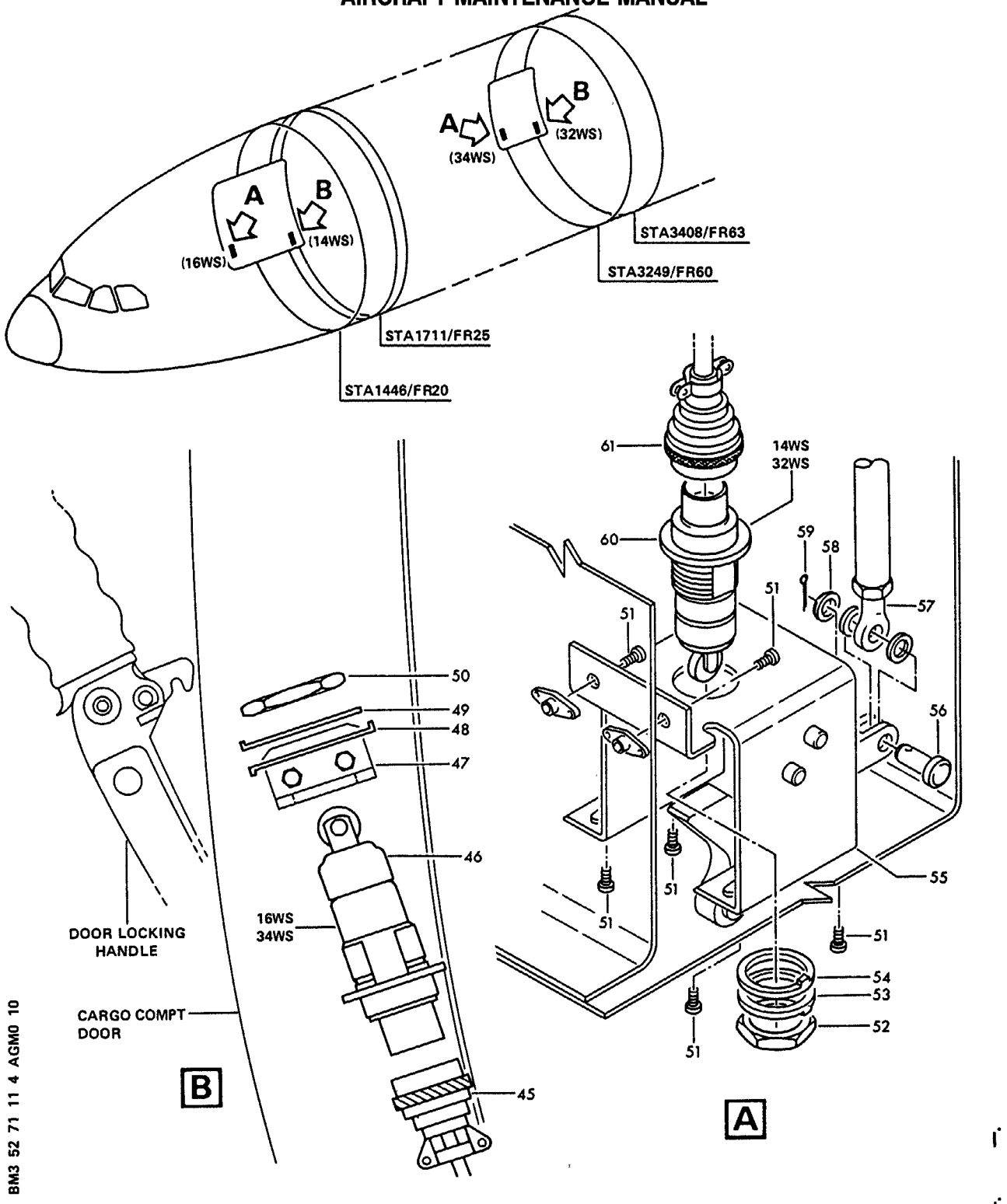
BM6 52 71 11 4 ACM0 01

AFT Passenger/Crew Doors - Warning Switches (25WS, 38WS)
Figure 402

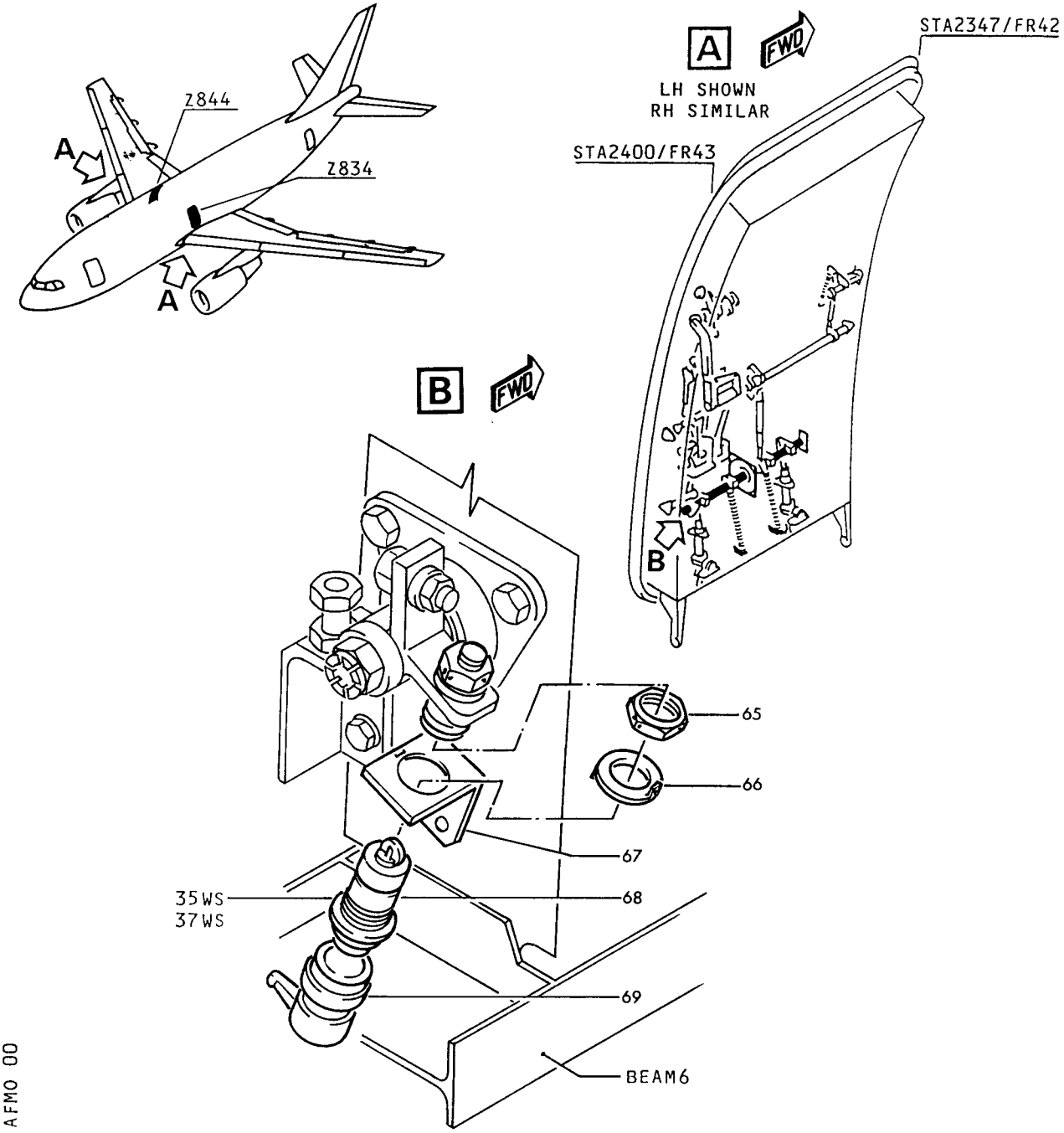
R



Emergency Exits - Warning Switches (31WS, 33WS)
Figure 403



FWD and AFT Cargo Compartment Doors - Warning Switches
(14WS, 16WS, 32WS, 34WS)
Figure 404



BM6 52 71 11 4 AFMO 00

Emergency Exits - Limit Switches (35WS, 37WS)
Figure 405

(2)AFT Passenger/Crew Doors (Ref. Fig. 402)
(a)Warning Switches 25WS and 38WS
1 Remove upper door frame panel (Ref. 25-23-41, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (18) from switch (19).
4 Remove nut (23), lock washer (22) and locating washer (21).
5 Remove switch (19) from bracket (20).
(b)Warning Switches 46WS and 47WS
1 Remove guide arm lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (24) from switch (25).
4 Remove nut (29), lock washer (28) and locating washer (27).
5 Remove switch (25) from mounting bracket (26).
(3)Emergency Exits (Ref. Fig. 403)
(a)Warning Switches 31WS and 33WS
1 Remove lining and insulation from upper area of door Ref. 52-23-13, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (35) from switch (36).
4 Remove nut (40), lock washer (39) and locating washer (38).
5 Remove switch (36) from mounting bracket (37).
(4)FWD and AFT Cargo Compartment Doors (Ref. Fig. 404)
(a)Warning Switches 16WS (FWD) and 34WS (AFT)
1 Position access platform.
2 Open handhole cover for door locking handle and pull locking handle out of recess.
3 Remove cover assemblies 811CR and 811DR (FWD), 812CR and 812DR (AFT).
4 Disconnect electrical connector (45) from switch (46).
5 Remove nut (50), lock washer (49) and locating washer (48).
6 Remove switch (46) from mounting bracket (47).
(b)Warning Switches 14WS (FWD) and 32WS (AFT)
1 Position access platform.
2 Undo quick-release fasteners and remove access panel 811BR (FWD), 812BR (AFT).
3 Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) and install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).
4 Remove cotter pin (59), washer (58) and clevis pin (56). Discard cotter pin.
5 Withdraw eye-end (13) together with washers from operating lever fork end.
6 Disconnect electrical connector (61) from switch (60).
7 Remove screws (51) securing switch housing (55) to door structure and remove housing from door.
8 Remove nut (52), lock washer (53) and locating washer (54).
9 Remove switch (60) from housing (55).

R **ON A/C 001-100, 105-200,

B. Removal

CAUTION : WARNING SWITCHES FOR PASSENGER/CREW DOORS AND EMERGENCY EXITS WS CIRCUIT ARE CODED. FOR WS CIRCUIT USE ONLY THIS TYPE OF WARNING SWITCHES.

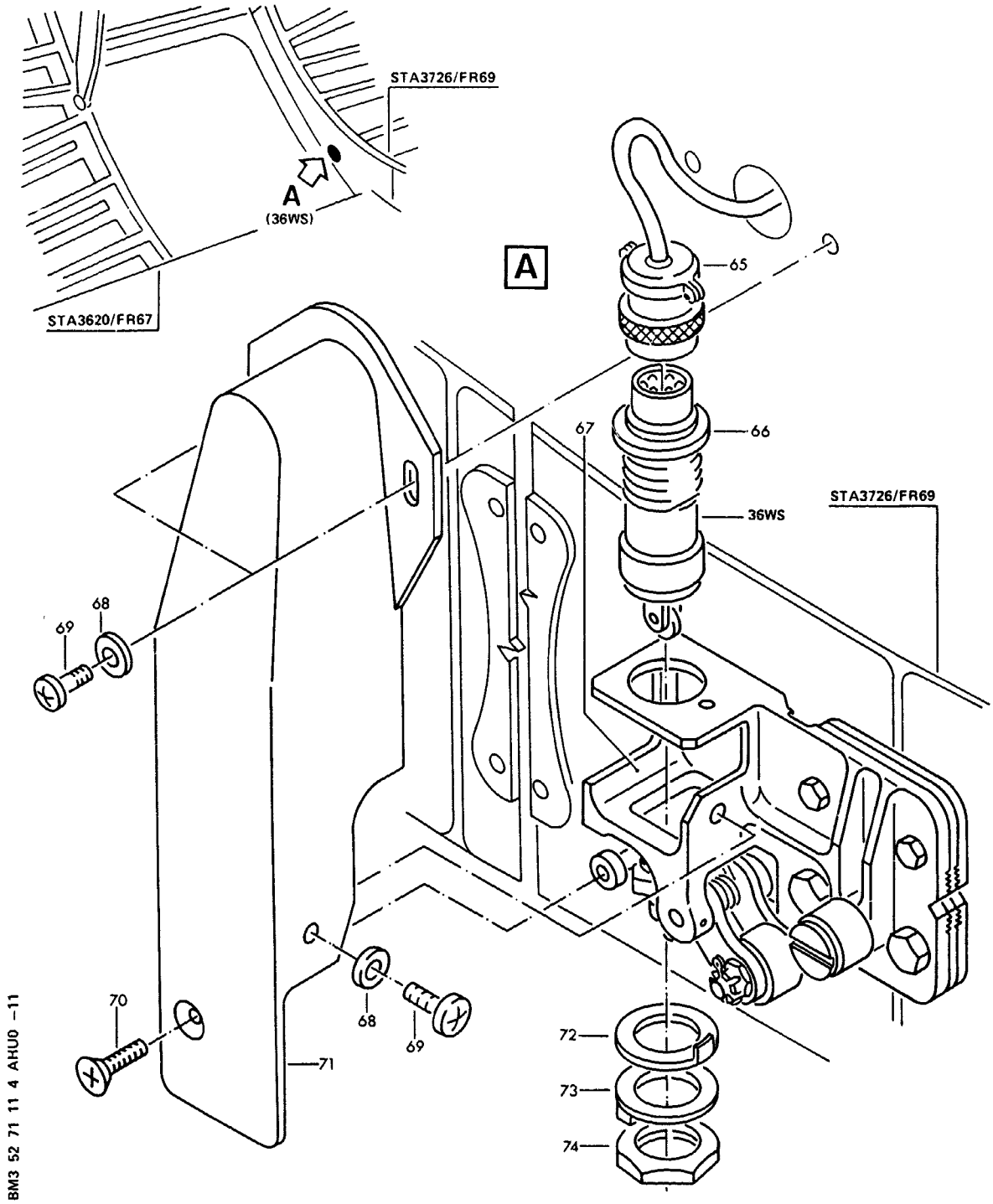
(1)FWD Passenger/Crew Doors (Ref. Fig. 401)
(a)Warning Switches 7WS and 8WS
1 Remove access cover (Ref. 25-23-41, P. Block 401).
2 Unlock door.
3 Cut and remove lockwire (11).
4 Disconnect electrical connector (7) from switch (8).
5 Remove nut (10), washer (9) from switch (8).
6 Remove switch (8) from mounting bracket (12).
(b)Warning Switches 42WS and 43WS
1 Remove door upper lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (1) from switch (2).
4 Remove nut (5), lock washer (4) and locating washer (3).
5 Remove switch (2) from bracket (6).
(2)AFT Passenger/Crew Doors (Ref. Fig. 402)
(a)Warning Switches 25WS and 38WS
1 Remove upper door frame panel (Ref. 25-23-41, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (18) from switch (19).
4 Remove nut (23), lock washer (22) and locating washer (21).
5 Remove switch (19) from bracket (20).
(b)Warning Switches 46WS and 47WS
1 Remove guide arm lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (24) from switch (25).
4 Remove nut (29), lock washer (28) and locating washer (27).
5 Remove switch (25) from mounting bracket (26).
(3)Emergency Exits (Ref. Fig. 403)
(a)Warning Switches 31WS and 33WS
1 Remove lining and insulation from upper area of emergency exit door (Ref. 52-23-13, P. Block 401).
2 Unlock door.
3 Disconnect electrical connector (35) from switch (36).
4 Remove nut (40), lock washer (39) and locating washer (38).
5 Remove switch (36) from mounting bracket (37).
(b)Limit Switches 35WS and 37WS (Ref. Fig. 405)
1 Remove lining and insulation from lower area of emergency exit door (Ref. 52-23-13, P. Block 401).
2 Unlock emergency exit door.
3 Disconnect electrical connector (69) from switch (68).
4 Cut and remove lockwire.
5 Remove nut (65) and locating washer (66).
6 Remove switch (68) from mounting bracket (67).

(4)FWD and AFT Cargo Compartment Doors (Ref. Fig. 404)
(a)Warning Switches 16WS (FWD) and 34WS (AFT)
1 Open handhole cover for door locking handle and pull door locking handle out of recess.
2 Remove cover assemblies 811CR and 811DR (FWD), 812CR and 812DR (AFT).
3 Disconnect electrical connector (45) from switch (46).
4 Remove nut (50), lock washer (49) and locating washer (48).
5 Remove switch (46) from mounting bracket (47).
(b)Warning Switches 14WS (FWD) and 32WS (AFT)
1 Undo quick-release fasteners and remove access panel 811BR (FWD), 812BR (AFT).
2 Open FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1) and install door actuator safety lock(s) to FWD and/or AFT cargo compartment door actuator(s) (Ref. 52-30-00, P. Block 301).
3 Remove cotter pin (59), washer (58) and clevis pin (56). Discard cotter pin (59).
4 Withdraw eye-end (57) together with washers from operating lever fork end.
5 Disconnect electrical connector (61) from switch (60).
6 Remove screws (51) and housing (55) from door structure.
7 Remove nut (52), lock washer (53) and locating washer (54).
8 Remove switch (60) from housing (55).

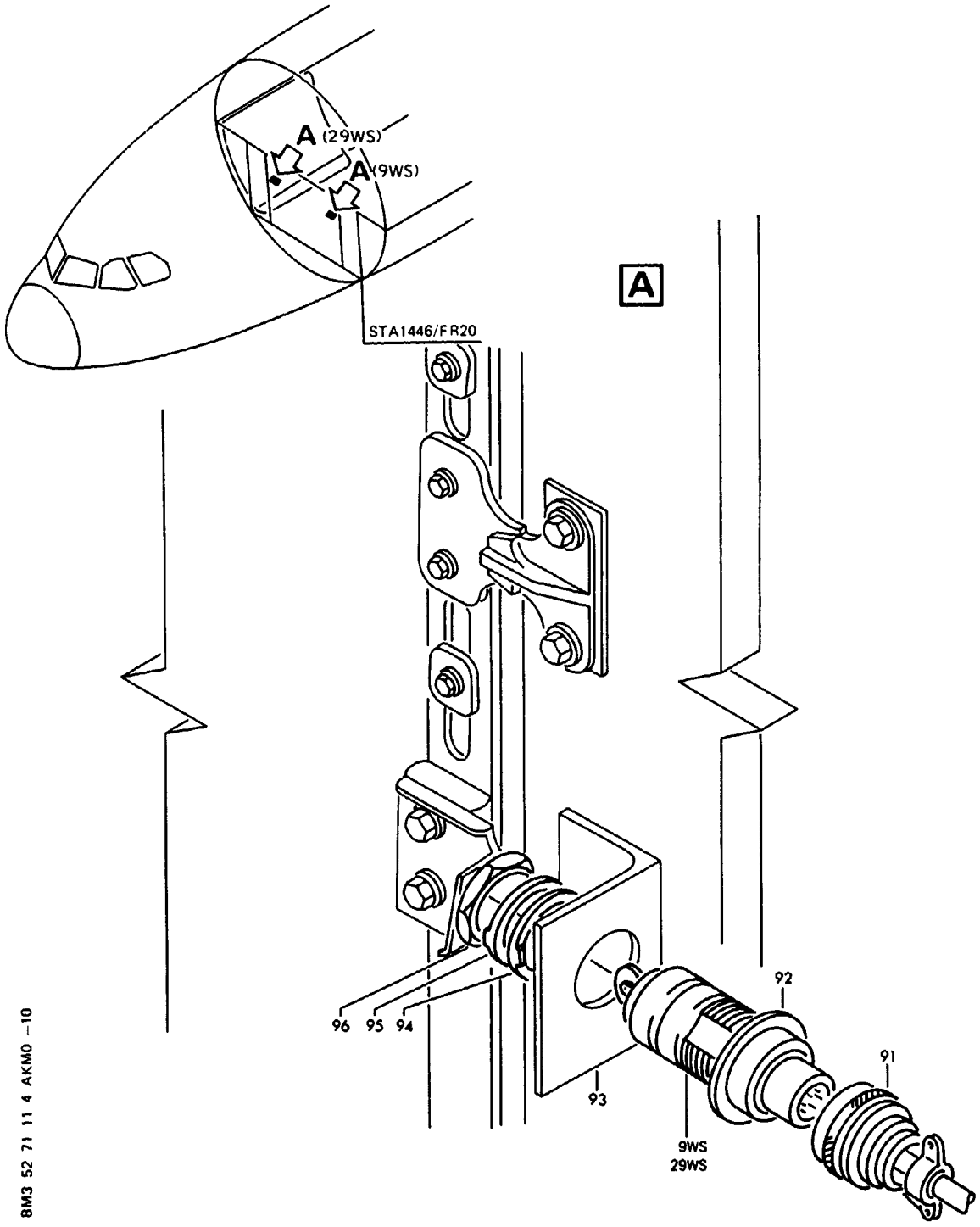
**ON A/C ALL

(Ref. Fig. 406)
(Ref. Fig. 407)
(Ref. Fig. 408)
(5)BULK Cargo Compartment Door
(a)Warning Switch 36WS
1 Unlock door.
2 Remove screws (69) and (70), washers (68) and switch cover (71).
3 Disconnect electrical connector (65) from switch (66).
4 Remove nut (74), lock washer (73) and locating washer (72).
5 Remove switch (66) from bracket (67).

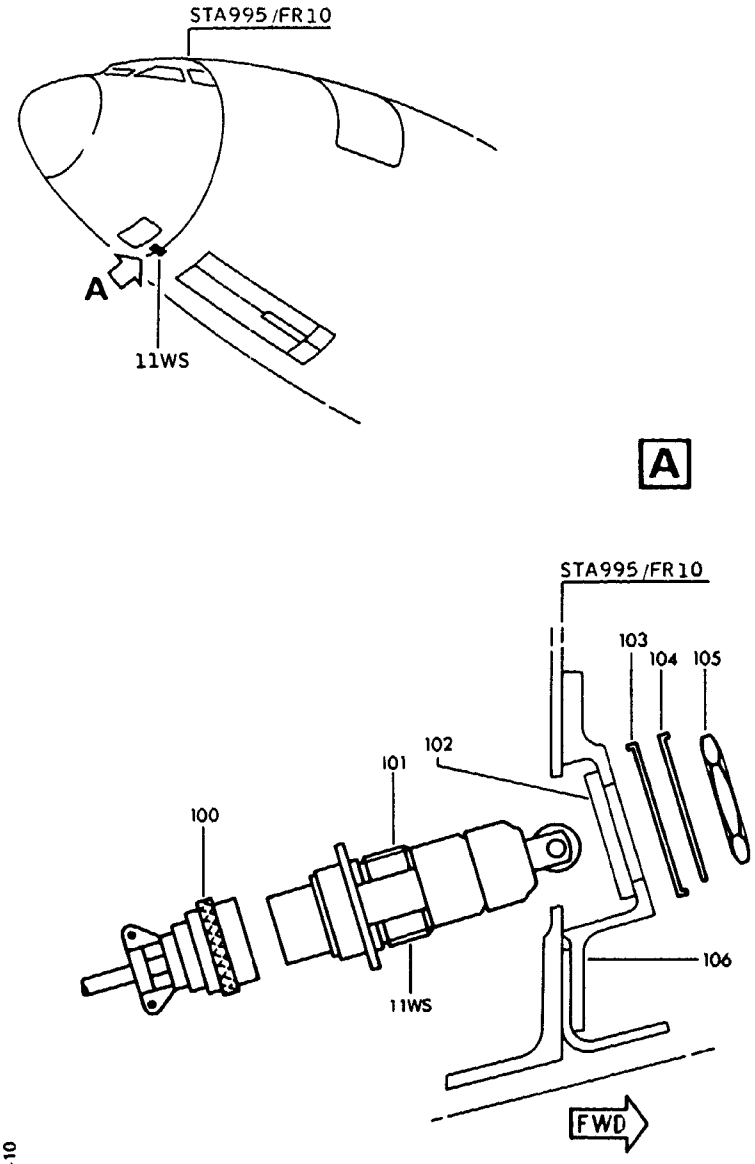
(6)Avionics Compartment Doors Frame 20 (131AZ, 132AZ) (Ref. Fig. 407)
(a)Warning Switches 9WS and 29WS
1 Unlock door.
2 Disconnect electrical connector (91) from switch (92).
3 Remove nut (96), lock washer (95) and locating washer (94).
4 Remove switch (92) from bracket (93).
(7)Avionics Compartment Access Door (121BL) (Ref. Fig. 408)
(a)Warning Switch 11WS
1 Unlock door.
2 Disconnect electrical connector (100) from switch (101).
3 Remove nut (105), lock washer (104) and locating washer (103).
4 Remove switch (101) from bracket (106).
NOTE : Make certain that special washer (102) is retained in situ on structure.



BULK Cargo Compartment Door - Warning Switch (36WS)
Figure 406



Avionics Compartment Doors Frame 20 (131AZ, 132AZ) -
Warning Switches (9WS, 29WS)
Figure 407



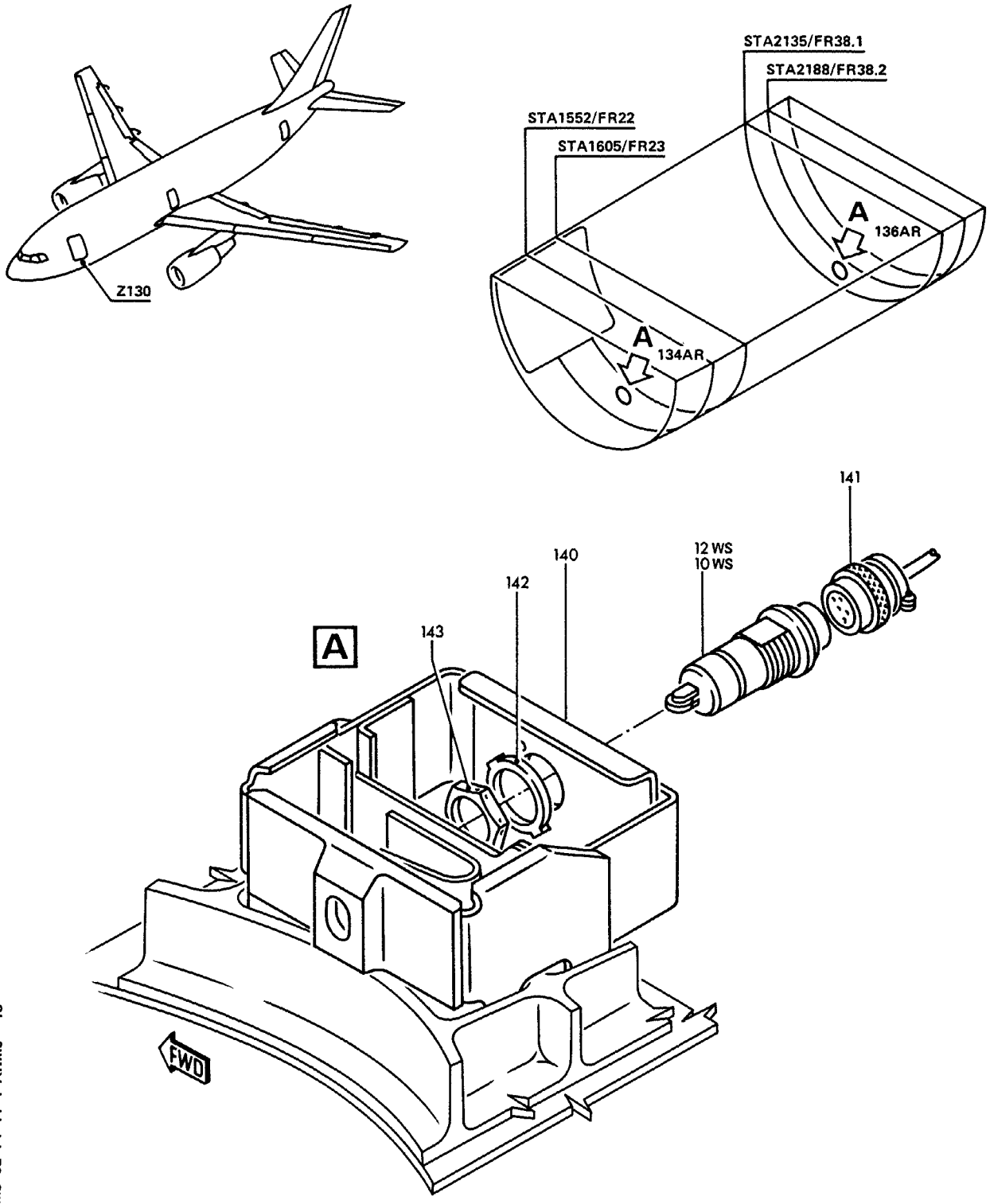
BM3 52 71 11 4 AMM0 -10

Avionics Compartment Access Door (121BL) -
Warning Switch (11WS)
Figure 408

(Ref. Fig. 409)
(8)Lower Access Doors (Ref. Fig. 409)
(a)Warning Switches 10WS and 12WS
1 Unlock door.
2 Disconnect electrical connector (141) from switch.
3 Cut and remove lockwire.
4 Remove nut (143) and locating washer (142).
5 Remove switch from bracket (140).

R **ON A/C 101-104,

C. Installation
CAUTION : WARNING SWITCHES FOR PASSENGER/CREW DOORS AND EMERGENCY EXITS WS CIRCUIT ARE CODED. FOR WS CIRCUIT USE ONLY THIS TYPE OF WARNING SWITCHES.
(1)FWD Passenger/Crew Doors (Ref. Fig. 401)
(a)Warning Switches 7WS and 8WS
1 Position switch (8) in mounting bracket (12).
2 Install washer (9) and nut (10). Safety nut (10) with lockwire (11).
3 Connect electrical connector (7) to switch (8).
4 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
5 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
(b)Warning Switches 42WS and 43WS
1 Position switch (2) in mounting bracket (6).
2 Install locating washer (3), lock washer (4) and nut (5).
3 Tighten and lock nut (5).
4 Connect electrical connector (1) to switch (2).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
(2)AFT Passenger/Crew Doors (Ref. Fig. 402)
(a)Warning Switches 25WS and 38WS
1 Position switch (19) in mounting bracket (20).
2 Install locating washer (21), lock washer (22) and nut (23).
3 Tighten and lock nut (23).
4 Connect electrical connector (18) to switch (19).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
(b)Warning Switches 46WS and 47WS
1 Position switch (25) in mounting bracket (26).
2 Install locating washer (27), lock washer (28) and nut (29).
3 Tighten and lock nut (29).
4 Connect electrical connector (24) to switch (25).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
(3)Emergency Exits (Ref. Fig. 403)
(a)Warning Switches 31WS and 33WS



BM3 52 71 11 4 ANM0 -15

Lower Access Doors (134AR, 136AR) -
Warning Switches (10WS, 12WS)
Figure 409

1 Position switch (36) in mounting bracket (37).
2 Install locating washer (38), lock washer (39) and nut (40).
3 Tighten and lock nut (40).
4 Connect electrical connector (35) to switch (36).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(4)FWD and AFT Cargo Compartment Doors (Ref. Fig. 404)

(a)Warning Switches 16WS (FWD) and 34WS (AFT)

1 Position switch (46) in mounting bracket (47).
2 Install locating washer (48), lock washer (49) and nut (50).
3 Tighten and lock nut (50).
4 Connect electrical connector (45) to switch (46).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
7 Replace cover assemblies 811CR and 811DR (FWD), 812CR and 812DR (AFT).
8 Return locking handle to recess and close handhole cover.

(b)Warning Switches 14WS (FWD) and 32WS (AFT)

1 Position switch (60) in housing (55).
2 Install locating washer (54), lock washer (53) and nut (52).
3 Tighten and lock nut (52).
4 Install housing (55) in door structure using screws (51) coated with thread sealing compound (Material No. 09-001).
5 Connect eye-end together with washers (57) to operating lever fork end using clevis pin (56), washer (58) and new cotter pin (59).
6 Connect electrical connector (61) to switch (60).
7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
8 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
9 Replace access panel 811BR (FWD), 812BR (AFT) and secure with quick-release fasteners.

R **ON A/C 001-100, 105-200,

C. Installation

CAUTION : WARNING SWITCHES FOR PASSENGER/CREW DOORS AND EMERGENCY EXITS WS CIRCUIT ARE CODED. FOR WS CIRCUIT USE ONLY THIS TYPE OF WARNING SWITCHES.

(1)FWD Passenger/Crew Doors (Ref. Fig. 401)

(a)Warning Switches 7WS and 8WS

1 Position switch (8) in mounting bracket (12).
2 Install washer (9) and nut (10). Safety nut (10) with lockwire (11).
3 Connect electrical connector (7) to switch (8).

4 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
5 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(b)Warning Switches 42WS and 43WS
1 Position switch (2) in mounting bracket (6).
2 Install locating washer (3), lock washer (4) and nut (5).
3 Tighten and lock nut (5).
4 Connect electrical connector (1) to switch (2).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(2)AFT Passenger/Crew Doors (Ref. Fig. 402)

(a)Warning Switches 25WS and 38WS
1 Position switch (19) in mounting bracket (20).
2 Install locating washer (21), lock washer (22) and nut (23).
3 Tighten and lock nut (23).
4 Connect electrical connector (18) to switch (19).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(b)Warning Switches 46WS and 47WS
1 Position switch (25) in mounting bracket (26).
2 Install locating washer (27), lock washer (28) and nut (29).
3 Tighten and lock nut (29).
4 Connect electrical connector (24) to switch (25).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(3)Emergency Exits (Ref. Fig. 403)

(a)Warning Switches 31WS and 33WS
1 Position switch (36) in mounting bracket (37).
2 Install locating washer (38), lock washer (39) and nut (40).
3 Tighten and lock nut (40).
4 Connect electrical connector (35) to switch (36).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(b)Limit Switches 35WS and 37WS (Ref. Fig. 405)
1 Position switch (68) in mounting bracket (67).
2 Install locating washer (66) and nut (65).
3 Tighten nut (65).
4 Safety nut (65) with lockwire.
5 Connect electrical connector (69) to switch (68).
6 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
7 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(4)FWD and AFT Cargo Compartment Doors (Ref. Fig. 404)

(a)Warning Switches 16WS (FWD) and 34WS (AFT)
1 Position switch (46) in mounting bracket (47).
2 Install locating washer (48), lock washer (49) and nut (50).
3 Tighten and lock nut (50).

4 Connect electrical connector (45) to switch (46).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
7 Replace cover assemblies 811CR and 811DR (FWD), 812CR and 812DR (AFT).
8 Return door locking handle into recess and close handhole cover.

(b)Warning Switches 14WS (FWD) and 32WS (AFT)
1 Position switch (60) in housing (55).
2 Install locating washer (54), lock washer (53) and nut (52).
3 Tighten and lock nut (52).
4 Apply thread sealing compound (Material No. 09-001) to screws (51).
5 Install housing (55) in door structure with screws (51).
6 Connect eye-end (57) together with washers to operating lever fork end using clevis pin (56), washer (58) and new cotter pin (59).
7 Connect electrical connector (61) to switch (60).
8 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
9 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).
10 Replace access panel 811BR (FWD), 812BR (AFT) and secure with quick-release fasteners.

**ON A/C ALL

(5)Bulk Cargo Compartment Door (Ref. Fig. 406)
(a)Warning Switch 36WS
1 Carry out adjustment procedure before installing switch (Ref. 52-71-11, P. Block 501).
2 Position switch (66) in mounting bracket (67).
3 Install locating washer (72), lock washer (73) and nut (74).
4 Tighten and lock nut (74).
5 Connect electrical connector (65) to switch (66).
6 Install switch cover (71) using screws (69) and (70) and washers (68).
7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
8 Perform test of switch (Ref. 52-71-11, P. Block 501).

(6)Avionics Compartment Doors Frame 20 (131AZ, 132AZ) (Ref. Fig. 407)
(a)Warning Switches 9WS and 29WS
1 Position switch (92) in mounting bracket (93).
2 Install locating washer (94), lock washer (95) and nut (96).
3 Tighten and lock nut.
4 Connect electrical connector (91) to switch (92).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(7)Avionics Compartment Access Door (121BL) (Ref. Fig. 408)
(a)Warning Switch 11WS
NOTE : Make certain that special washer (102) is firmly in situ on structure. If not, clean old sealant from washer and structure, apply light coating of sealant (Material No. 09-011) to mating surface of washer only and reposition washer.

1 Position switch (101) in mounting bracket (106).
2 Install locating washer (103), lock washer (104) and nut (105).
3 Tighten and lock nut (105).
4 Connect electrical connector (100) to switch (101).
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out adjustment/test of switch (Ref. 52-71-11, P. Block 501).

(8)Lower Access Doors (Ref. Fig. 409)
(a)Warning Switches 10WS and 12WS.
1 Position switch 10WS or 12WS in mounting bracket (140).
2 Install locating washer (142) and nut (143).
3 Tighten and lock nut (143).
4 Connect electrical connector (141) to switch 10WS or 12WS.
5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
6 Carry out test of switches (Ref. 52-71-11, P. Block 501).

D. Test
(1)For adjustment/test procedures refer to 52-71-11, P. Block 501.

E. Close-Up
(1)Remove safety clips and tags and close circuit breakers as listed in Para. 3.A.(3).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)On all passenger/crew doors, cargo compartment doors and emergency exit doors:
Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(4)Install linings and access panels where removed.
(5)Remove door actuator safety lock(s) (Ref. 52-30-00, P. Block 301).
(6)Close FWD and/or AFT cargo compartment door(s) (Ref. 52-30-00, P. Block 1).
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND 52-23-00, P. BLOCK 301).
(7)Arm door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301, and 52-23-00, P. Block 301).
(8)Close door(s) and remove access platform.

DOOR WARNING SWITCHES - ADJUSTMENT/TEST

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

1. Reason for the Job

Adjustment/Test of the door warning system warning switches associated with the following doors:
- FWD Passenger/Crew Doors
- AFT Passenger/Crew Doors
- Emergency Exits
- FWD and AFT Cargo Compartment Doors
- BULK Cargo Compartment Door
- Avionics Compartment Doors FR20 (131AZ,132AZ)
- Avionics Compartment Access Door (121BL)
- Lower Access Doors (134AR,136AR)

2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.50 to 5 m (8 to 16 ft.)
B. 35M5M01160001	Setting Tool - Microswitch Unit
R	or
R	Cable Adapter Plug with Ohmmeter
R	(range more than 1 k ohm)
C. 98A52307622000	Gage - Measuring, BULK Cargo Compartment Door Locking Mechanism
D. 98A52308019000	Jig - Cargo Door, Microswitch Adjustment
E.	Feeler Gage
F.	Depth Gage
G.	Torque Wrench, 0.35 to 0.45 m.daN (30 to 40 lbf.in.)
H.	Circuit Breaker Safety Clips and Tags
I.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.03 in.)
J.	Spacer 1.4 ±0.2 mm (0.055 ±0.008 in.)
K. Material No. 05-002	Special Materials (Ref. 20-31-00)
L. Material No. 09-011	Sealants (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-23-41, P. Block 401	Door Frame Lining
- 25-61-23, P. Block 401	Overwing Escape Slide
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-10-20, P. Block 501	FWD, AFT Door Locking Mechanism
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-13, P. Block 401	Lining and Insulation

- 52-23-21, P. Block 501 Locking Mechanism
- 52-30-21, P. Block 501 FWD, AFT Cargo Door Locking Mechanism
- 52-34-11, P. Block 501 BULK Cargo Compartment Door
- 52-71-11, P. Block 401 Door Warning Switches

3. Procedure

A. Job Set-Up

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

NOTE : Before commencing the operations detailed in this topic, make certain that the locking mechanism of the door is properly adjusted (Ref. 52-10-20, P. Block 501, Ref. 52-23-21, P. Block 501, Ref. 52-30-21, P. Block 501 and Ref. 52-34-11, P. Block 501).

(1)Position access platform to relevant door.

(2)Safety emergency escape slide, door damper emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301 and 52-23-00, P. Block 301).

(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
21VU	ECAM/CTL PNL LT	12WT	108/B01
21VU	ECAM/DISPLAY UNIT/L	7WT	108/B02
21VU	ECAM/DISPLAY UNIT/R	8WT	108/B03
21VU	ECAM/SGU/1	11WT1	108/B04
21VU	ECAM/SGU/2	11WT2	108/B05
21VU	ECAM/FLT WARN MONITOR	4WW	108/B06
21VU	ECAM/FLT WARN MONITOR	24WW	108/B07
21VU	ECAM/FWC 1	7WW	108/B08
21VU	ECAM/SDAC/26 V AC/NORM/1	3WV1	109/A02
21VU	ECAM/SDAC/26 V AC/NORM/2	3WV2	109/A03
21VU	ECAM/SDAC/26 V AC/ESS	5WV	109/A04
21VU	ECAM/SDAC/PWR SUPPLY	6WV	109/A05
21VU	ECAM/FWC 2	32WW	109/A08
22VU	SLIDES/HORN	2WN	205/E22
22VU	SLIDES/ARM ! WARN	1WN	205/E23

(4)Remove door linings for access to switches as follows:

(a)FWD Passenger/Crew Door LH and RH,

- switches 7WS and 8WS: corresponding panel of door frame lining (Ref. 25-23-41, P. Block 401)
- switches 42WS and 43WS: window lining (Ref. 52-10-13, P. Block 401).

(b)AFT Passenger/Crew Door LH and RH,

- switches 25WS and 38WS: corresponding panel of door frame lining (Ref. 25-23-41, P. Block 401)
- switches 31WS and 33WS: upper panel (Ref. 52-23-13, P. Block 401).

(5)Remove access panels from FWD and AFT Cargo Compartment Doors as follows:

(a)On FWD Cargo Compartment Door access panels 811BR and 811CR for switches 14WS and 16WS.

(b)On AFT Cargo Compartment Door access panels 812BR and 812CR for

switches 32WS and 34WS.
(6)On BULK Cargo Compartment Door remove switch cover for switch 36WS.

B. Adjustment

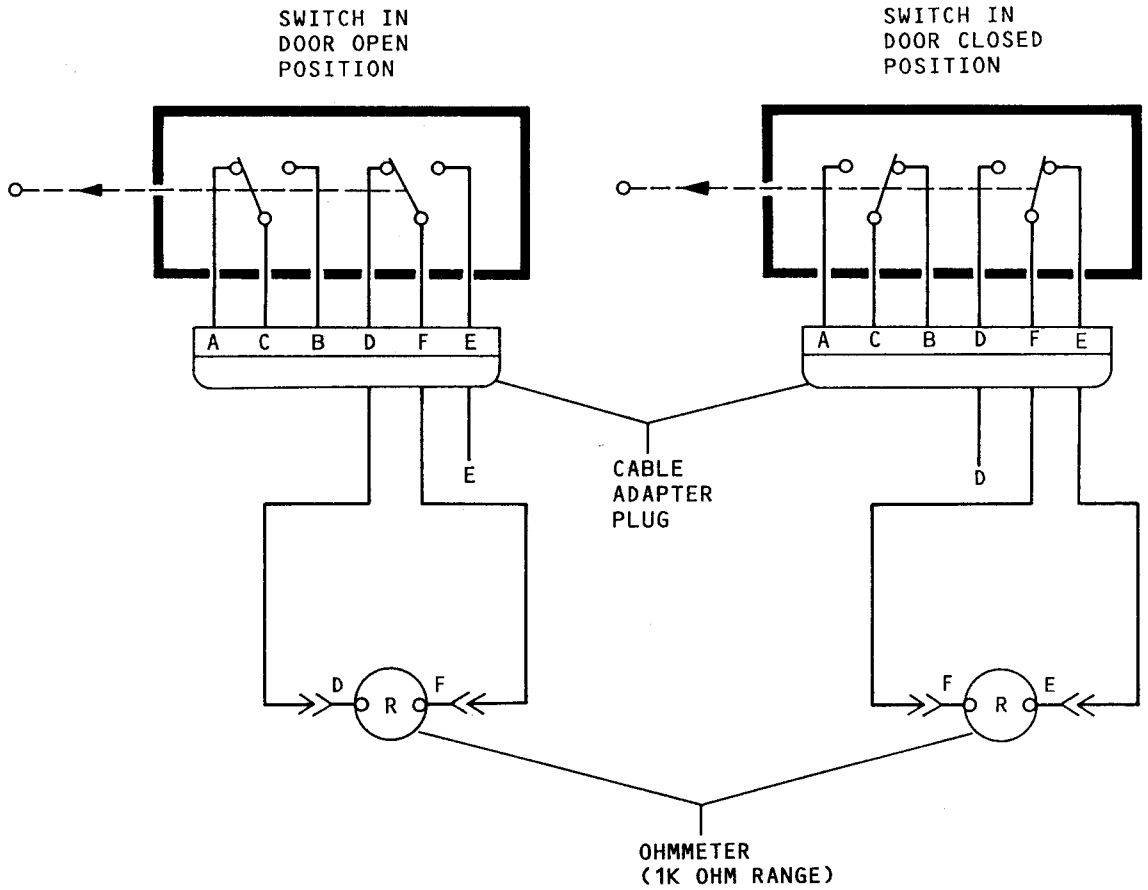
NOTE : The following describes the adjustment procedure with the use of the setting tool PN 35M5M01160001.
In place of the setting tool, a cable adapter plug with an ohmmeter can be used to get the operating point of the correlated switch (Ref. Fig. 501). This continuity test must be performed with a range more than 1 k ohm.
(Ref. Fig. 502)
(Ref. Fig. 503)
(Ref. Fig. 504)

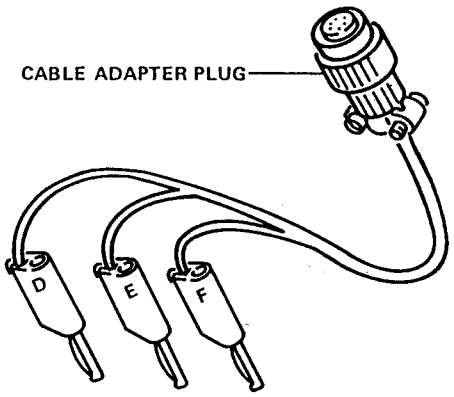
R **ON A/C 001-100, 105-200,

(Ref. Fig. 505)

**ON A/C ALL

(1)FWD Passenger/Crew Doors (Ref. Fig. 502)
(a)Warning Switches 7WS and 8WS
1 Remove upper door frame lining (Ref. 25-23-41, P. Block 401).
2 Close and lock door.
NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.
3 Disconnect electrical connector from warning switch and connect setting tool PN 35M5M01160001.
4 Turn adjustment screw (1) fully out (counterclockwise); then slowly turn adjustment screw (1) in (clockwise) until switch initial operating point is reached (visible signal on setting tool).
5 Turn adjustment screw (1) clockwise one turn and, if necessary, continue turning clockwise until locking spring engages against the flat on adjustment screw (1).
6 Remove setting tool PN 35M5M01160001 and reconnect electrical connector.
7 Install upper door frame lining (Ref. 25-23-41, P. Block 401).
(b)Warning Switches 42WS and 43WS
1 Remove door lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Remove nut (6), bolt (3) and washer (4) from operating lever (5).
4 Lock door.
5 Disconnect electrical connector from warning switch and connect setting tool PN 35M5M01160001.
6 Press in switch roller (2) manually.
7 Release switch roller (2) until initial switching point is reached (visible signal on setting tool).

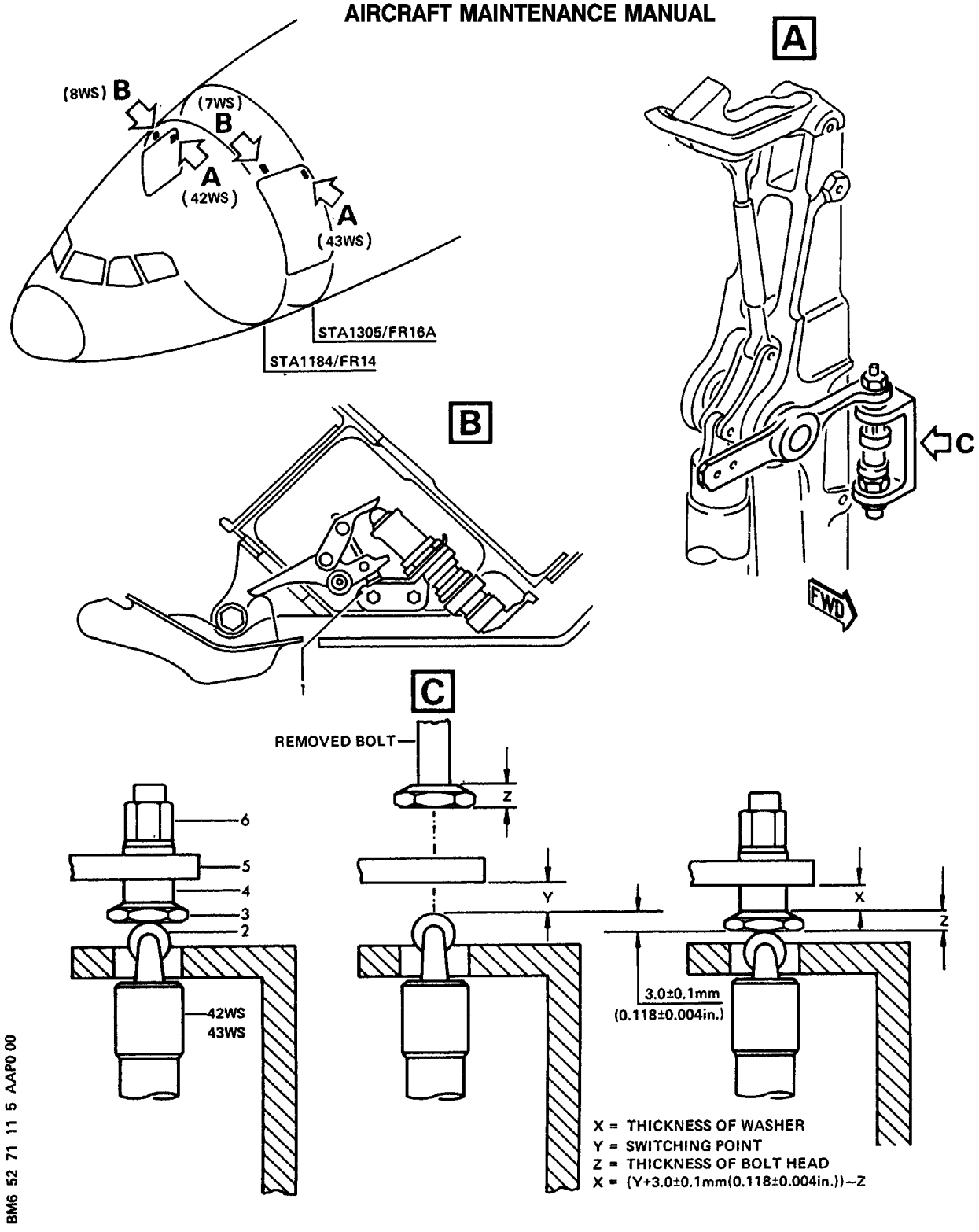




BM6 52 71 11 5 BAMO 00

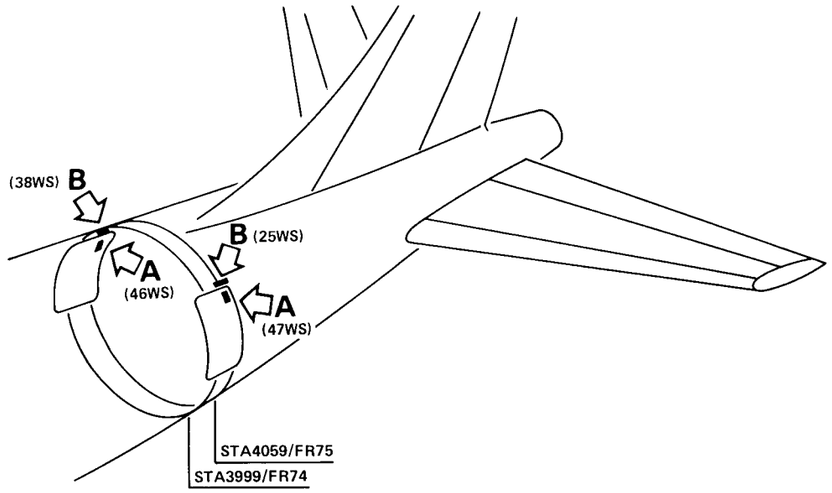
Adjustment of Switch with
Cable Adapter Plug and Ohmmeter
Figure 501

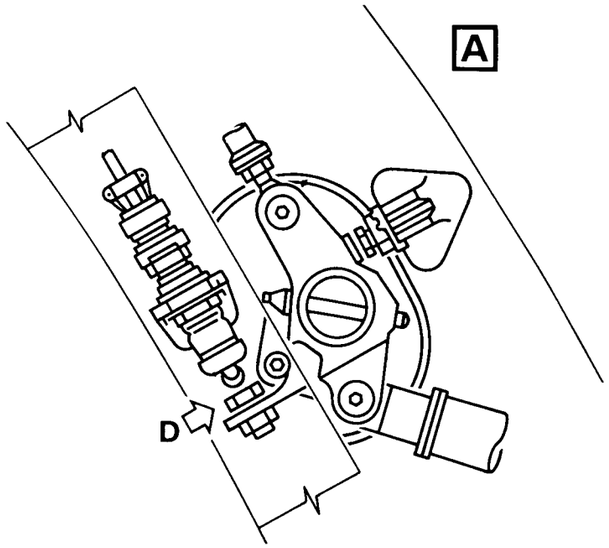
R

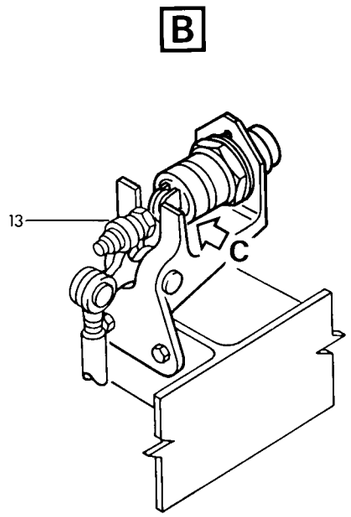


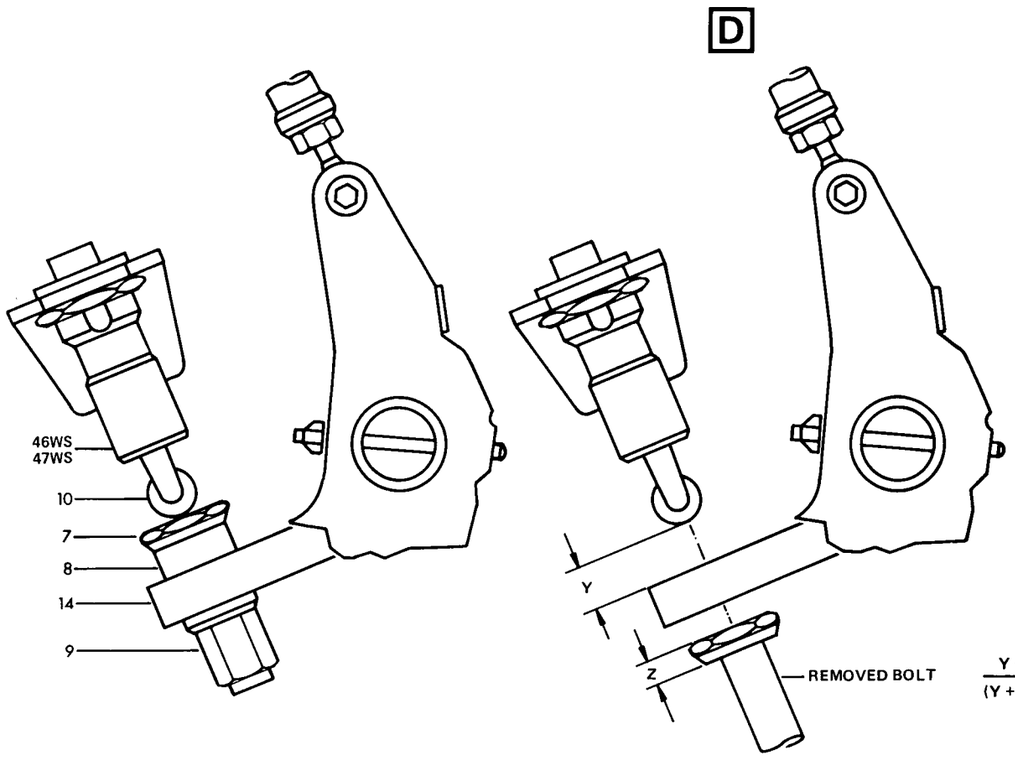
FWD Passenger/Crew Doors - Warning Switches
(7WS, 8WS, 42WS, 43WS)
Figure 502

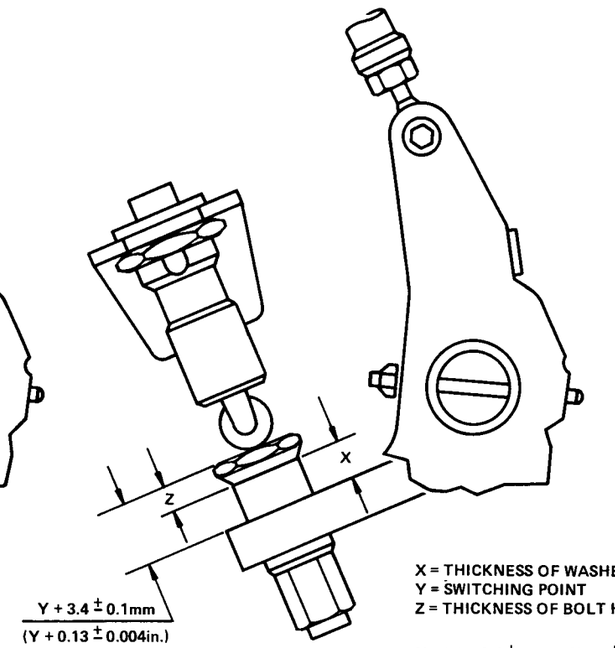
INTENTIONALLY BLANK





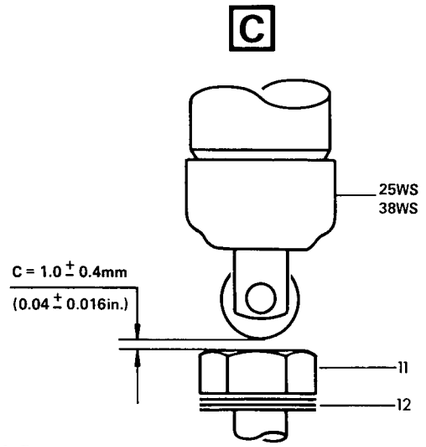






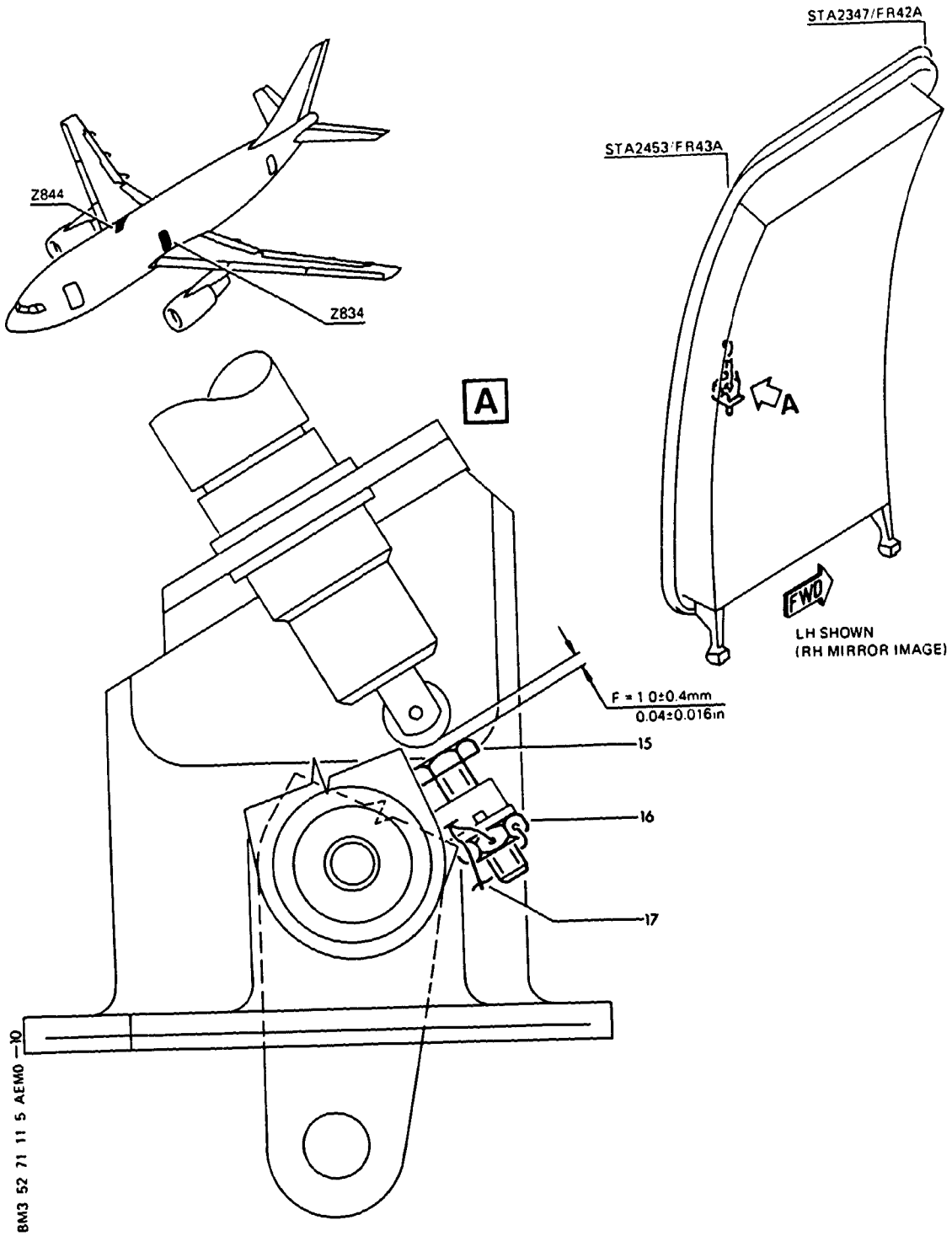
X = THICKNESS OF WASHER
Y = SWITCHING POINT
Z = THICKNESS OF BOLT HEAD

X = [Y + 3.4 ± 0.1mm(0.13 ± 0.004in.)]–Z

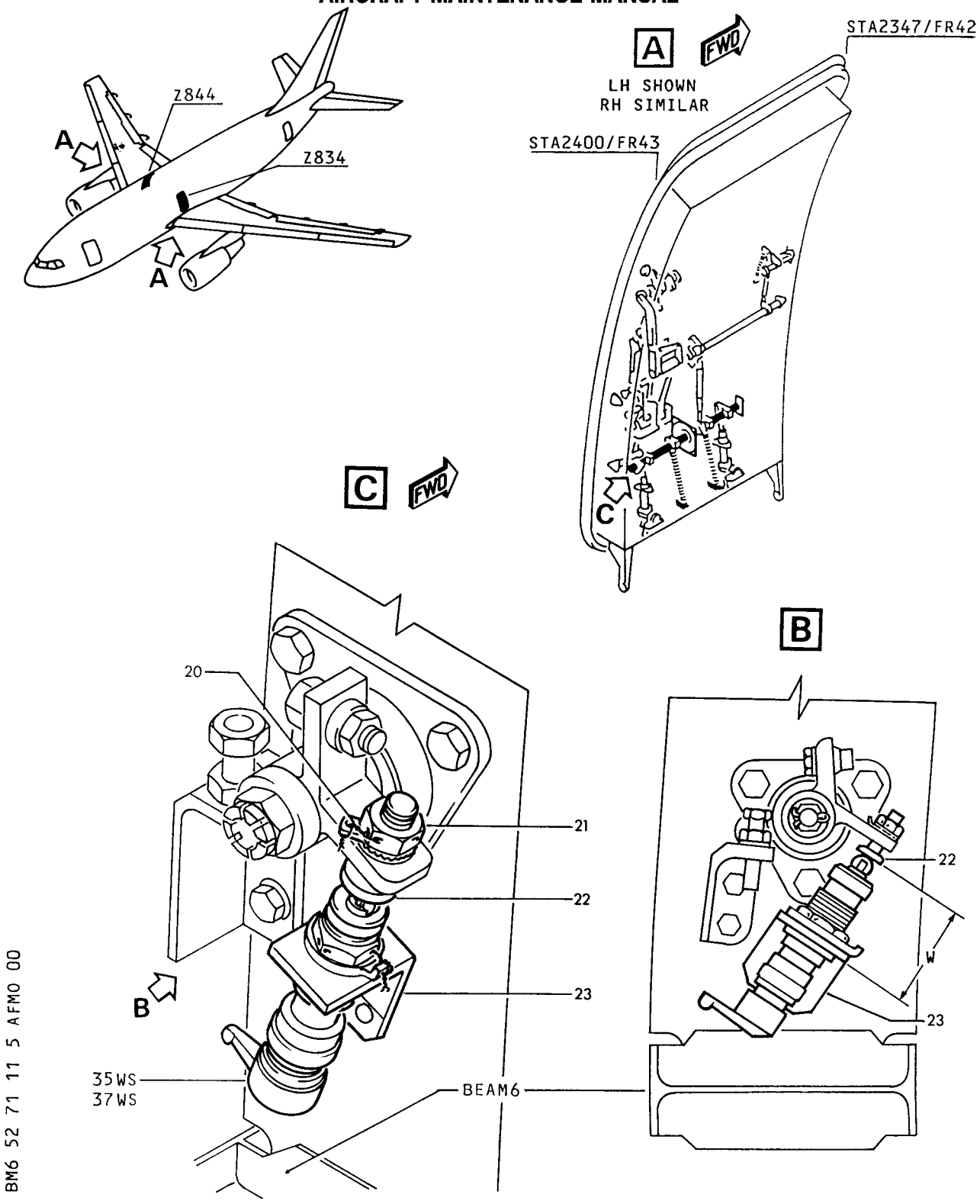


BM6 52 71 11 5 ACU0 01

AFT Passenger/Crew Doors - Warning Switches
(25WS, 38WS, 46WS, 47WS)
Figure 503



Emergency Exits Doors - Warning Switches
(31WS, 33WS)
Figure 504



Emergency Exits Doors - Limit Switches
(35WS, 37WS).
Figure 505

NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.

8 Using feeler gage, record gap "Y" between switch roller (2) and operating lever (5).

9 Determine distance "X" from recorded gap "Y" and add 3.0 ±0.1 mm (0.118 ±0.004 in.). Subtract bolt head thickness "Z".

10 Unlock door.

11 Install washer thickness "X" determined in step 9, bolt (3) and nut (6) to operating lever (5).

12 Disconnect setting tool PN 35M5M01160001 and reconnect electrical connector.

13 Adjust indicator window (Ref. 52-10-20, P. Block 501).

14 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

15 Install door lining (Ref. 52-10-13, P. Block 401).

R **ON A/C 101-104,

(2)AFT Passenger/Crew Doors (Ref. Fig. 503)

(a)Warning Switches 25WS and 38WS

1 Remove upper door frame lining (Ref. 25-23-41, P. Block 401).

2 Close and lock door.

NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.

3 Fully press in warning switch manually and, using feeler gage, check that clearance 'C' between switch roller and bolt (11) is 1.0 ±0.4 mm (0.04 ±0.016 in.).

4 If gap is out of tolerance, proceed as follows:

a Unlock door.

b Remove bolt (11) and shims (12) from operating lever (13).

c Add or remove shims (12) as necessary to obtain the required clearance.

d Install shims (12) and bolt (11) in operating lever (13).

5 Repeat steps 2 and 3.

6 If required, repeat steps 4a thru d to obtain the required setting.

7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

8 Install upper door frame lining (Ref. 25-23-41, P. Block 401).

(b)Warning Switches 46WS and 47WS

1 Remove door lining (Ref. 52-10-13, P. Block 401).

2 Unlock door.

3 Remove nut (9), bolt (7) and washer (8) from operating lever (14).

4 Lock door.

5 Disconnect electrical connector from warning switch and connect setting tool PN 35M5M01160001.

NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.

6 Using feeler gage, push the switch roller until switching point is reached (visible signal on test set).

7 Record this gap "Y" between roller (10) and operating lever (14).

8 Determine distance "X" from recorded gap "Y" and add 3.4 ±0.1 mm (0.13 ±0.004 in.). Subtract bolt head thickness "Z".
9 Unlock door.
10 Install washer thickness "X" determined in step (b)8, bolt (7) and nut (9) to operating lever (14).
11 Disconnect setting tool PN 35M5M01160001 and reconnect electrical connector.
12 Make certain that work area is clean and clear of miscellaneous items of equipment.
13 Adjust indicator window (Ref. 52-10-20, P. Block 501).
14 Install door lining (Ref. 52-10-13, P. Block 401).

(3)Emergency Exit Doors (Ref. Fig. 504)
(a)Warning Switches 31WS and 33WS
1 Remove slide cover and slide (Ref. 25-61-23, P. Block 401).
2 Remove lining and insulation in upper area of exit (Ref. 52-23-13, P. Block 401).
3 Close and lock exit.
NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.
4 Fully press in warning switch manually, using feeler gage, check that gap 'F' between switch roller and operating lever is 1.0 ±0.4 mm (0.04 ±0.016 in.).
5 If gap is out of tolerance, proceed as follows:
a Unlock exit.
b Cut and remove lockwire (17) and slacken locknut (16).
c Close and lock exit.
d Adjust screw (15) to obtain the required clearance.
e Tighten locknut (16), making certain that dimension 'F' is not altered.
6 Safety locknut (16) with lockwire (17).
7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
8 Install lining and insulation in upper area of exit (Ref. 52-23-13, P. Block 401).
9 Install slide and slide cover (Ref. 25-61-23, P. Block 401).

(4)FWD and AFT Cargo Compartment Doors

R **ON A/C 001-100, 105-200,

(2)AFT Passenger/Crew Doors (Ref. Fig. 503)
(a)Warning Switches 25WS and 38WS
1 Remove upper door frame lining (Ref. 25-23-41, P. Block 401).
2 Close and lock door.

NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.

3 Fully press in warning switch manually and, using feeler gage, check that clearance 'C' between switch roller and bolt (11) is 1.0 ±0.4 mm (0.04 ±0.016 in.).
4 If gap is out of tolerance, proceed as follows:
a Unlock door.
b Remove bolt (11) and shims (12) from operating lever (13).
c Add or remove shims (12) as necessary to obtain the required clearance.
d Install shims (12) and bolt (11) in operating lever (13).
5 Repeat steps 2 and 3.
6 If required, repeat steps 4a thru d to obtain the required setting.
7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
8 Install upper door frame lining (Ref. 25-23-41, P. Block 401).

(b)Warning Switches 46WS and 47WS

1 Remove door lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Remove nut (9), bolt (7) and washer (8) from operating lever (14).
4 Lock door.
5 Disconnect electrical connector from warning switch and connect setting tool PN 35M5M01160001.

NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.

6 Using feeler gage, push the switch roller until switching point is reached (visible signal on test set).
7 Record this gap "Y" between roller (10) and operating lever (14).
8 Determine distance "X" from recorded gap "Y" and add 3.4 ±0.1 mm (0.13 ±0.004 in.). Subtract bolt head thickness "Z".
9 Unlock door.
10 Install washer thickness "X" determined in step (b)8, bolt (7) and nut (9) to operating lever (14).
11 Disconnect setting tool PN 35M5M01160001 and reconnect electrical connector.
12 Make certain that work area is clean and clear of miscellaneous items of equipment.
13 Adjust indicator window (Ref. 52-10-20, P. Block 501).
14 Install door lining (Ref. 52-10-13, P. Block 401).

(3)Emergency Exit Doors (Ref. Fig. 504)

(a)Warning Switches 31WS and 33WS

1 Remove slide cover and slide (Ref. 25-61-23, P. Block 401).
2 Remove lining and insulation in upper area of exit (Ref. 52-23-13, P. Block 401).
3 Close and lock exit.

NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.

4 Fully press in warning switch manually, using feeler gage, check that gap 'F' between switch roller and operating lever is 1.0 ±0.4 mm

(0.04 ±0.016 in.).
5 If gap is out of tolerance, proceed as follows:
a Unlock exit.
b Cut and remove lockwire (17) and loosen locknut (16).
c Close and lock exit.
d Adjust screw (15) to obtain the required clearance.
e Tighten locknut (16) and make certain that dimension 'F' is not altered.
6 Safety locknut (16) with lockwire (17).
7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
8 Install lining and insulation in upper area of exit (Ref. 52-23-13, P. Block 401).

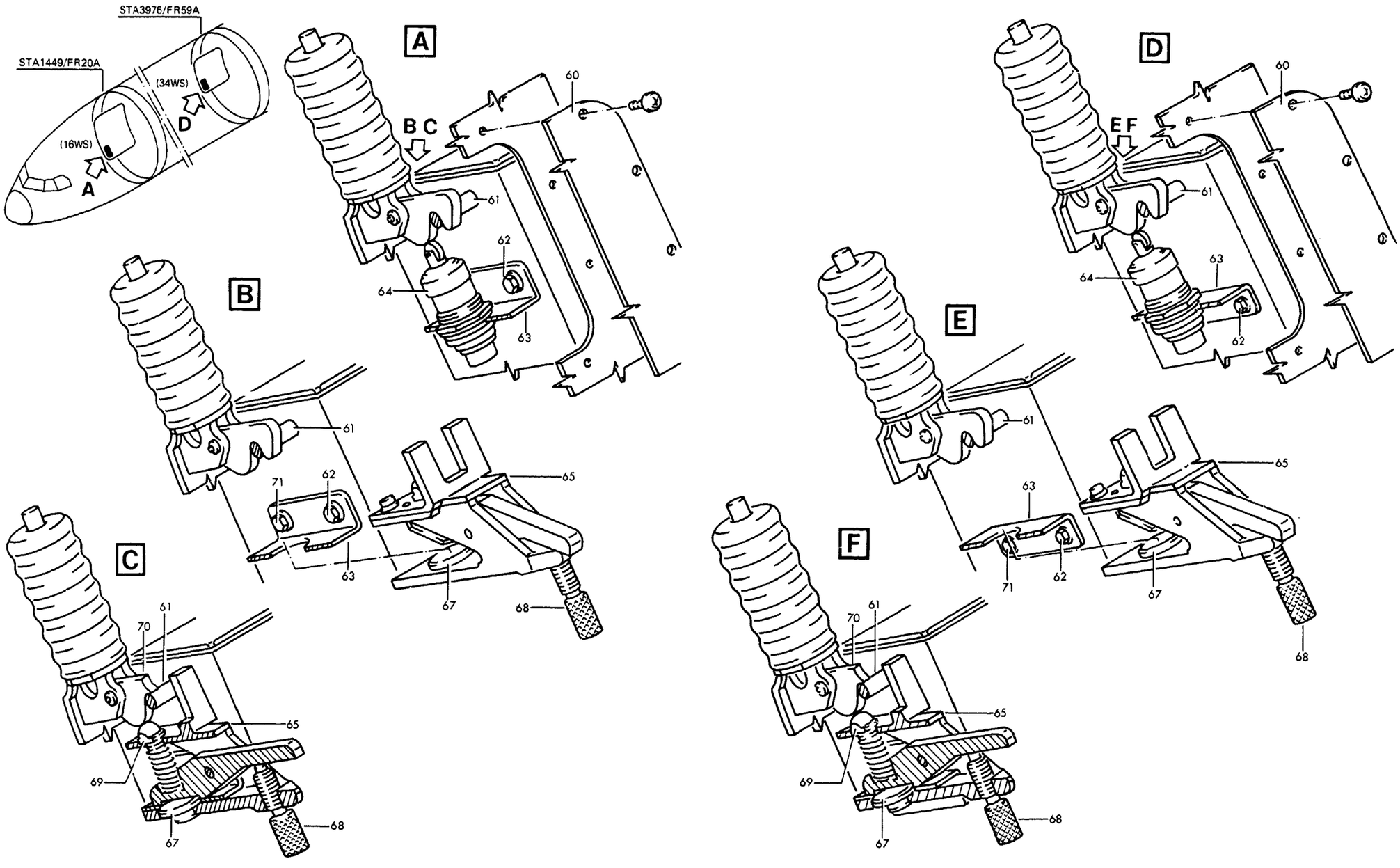
(b)Limit Switches 35WS and 37WS (Ref. Fig. 505)
1 Remove lining and insulation in lower area of exit (Ref. 52-23-13, P. Block 401).
2 Close and lock emergency exit door.
3 Make sure that clearance 'W' between bracket (23) and adjustment screw (22) is 44.5 ± 0.2 mm (1.75 ± 0.008 in.).
4 If clearance 'W' is out of tolerance, proceed as follows:
a Unlock emergency exit door.
b Cut and remove lockwire (20).
c Loosen locknut (21).
d Close and lock exit.
e Adjust screw (22) to obtain the required clearance 'W'.
f Tighten locknut (21) and make certain that dimension 'W' is not altered.
5 Safety locknut (21) with lockwire (20).
6 Make certain that work area is clean and clear of tools and miscellaneous items or equipment.
7 Install lining and insulation in lower area of exit (Ref. 52-23-13, P. Block 401).
8 Install slide and slide cover (Ref. 25-61-23, P. Block 401).

(4)FWD and AFT Cargo Compartment Doors

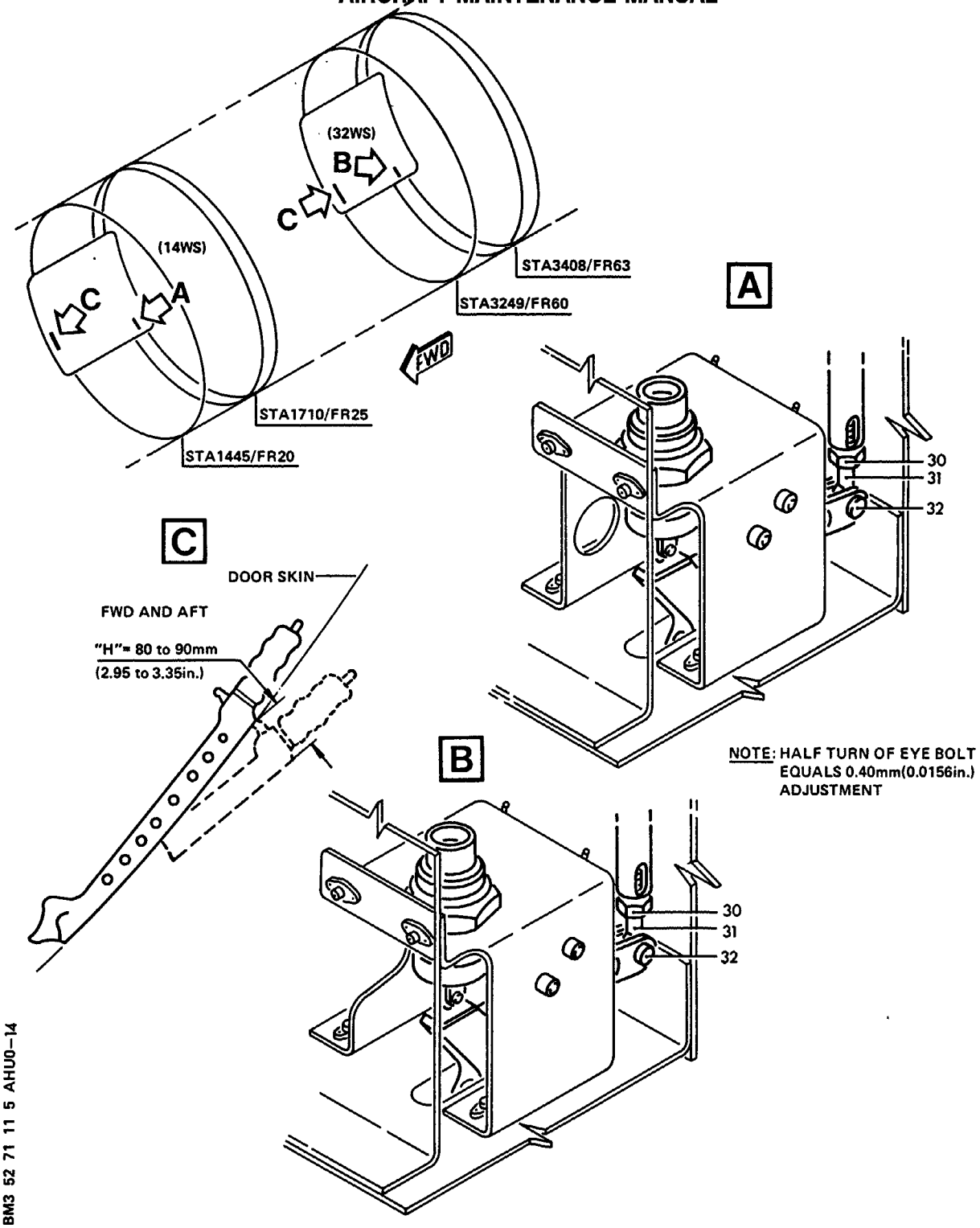
**ON A/C ALL

(Ref. Fig. 506)
(Ref. Fig. 507)

(a)Warning Switches 16WS (FWD) and 34WS (AFT) (Ref. Fig. 506)
1 Remove access cover (60).
2 Move operating handle from recess to gain access to warning switch.
3 Remove warning switch (64) (Ref. 52-71-11, P. Block 401).
4 Slacken attachment bolts (62),(71).
5 Apply corrosion preventive paste (Material No. 05-002) to attachment bolts (62),(71).
6 Move operating handle to closed position.
7 Loosen adjustment screw (68) of jig (65) PN 98A52308019000.
8 Position jig (65) with centering bolt (67) engaged in hole normally occupied by warning switch (64).
9 Tighten adjustment screw (68) securing jig (65) to mounting



FWD and AFT Cargo Compartment Doors -
Warning Switches (16WS, 34WS)
Figure 506

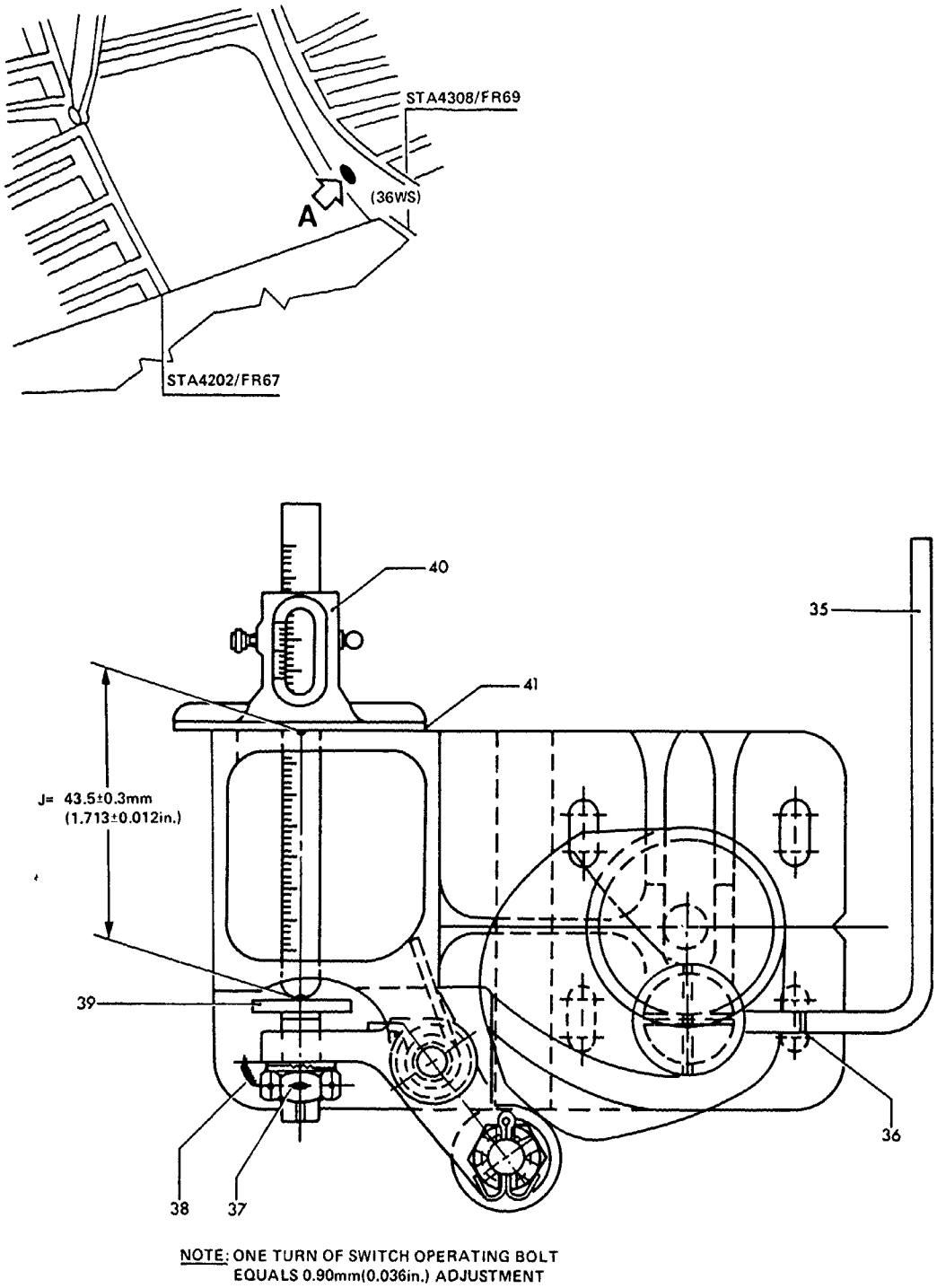


FWD and AFT Cargo Compartment Doors -
Warning Switches (14WS, 32WS)
Figure 507

bracket (63).
10 Adjust bracket (63) with installed jig (65) until stop bolt (69) of jig (65) contacts arresting hook (70) and upper part of the jig (65) contacts the locking bar (61).
11 Tighten attachment bolts (62).
12 Loosen adjustment screw (68) and remove jig (65).
13 Tighten attachment bolts (71).
14 TORQUE attachment bolts to between 0.35 and 0.45 m.daN (30 and 40 lbf.in.).
15 Install warning switch (64) (Ref. 52-71-11, P. Block 401).
16 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
17 Install access cover (60).

(b)Warning Switches 14WS and 32WS (Ref. Fig. 507)
1 Open access panels 811BR (FWD) and 812BR (AFT).
2 Close and lock cargo compartment door.
3 Remove electrical connector from warning switch.
4 Connect setting tool PN 35M5M01160001 on warning switch 14WS or 32WS.
5 Fully open operating handle and verify that test set indicates an open circuit.
6 Move operating handle back thru 97° and verify that setting tool PN 35M5M01160001 indicates a closed circuit.
NOTE : When operating handle is moved back thru 97°, the distance "H" between handle outer face and door skin is between 80 and 90 mm (3.15 to 3.54 in.).
7 Adjust setting by removing cotter pin and clevis pin (32). Slacken locknut (30) and adjust eye bolt (31). Insert clevis pin (32) and repeat steps 5 thru 7. Readjust eye bolt (31) as required to obtain correct setting.
8 Fit new cotter pin and tighten locknut (30).
9 Remove setting tool PN 35M5M01160001 and reconnect electrical connector.
10 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
11 Close access panels 811BR (FWD) and 812BR (AFT).
(Ref. Fig. 508)

(5)BULK Cargo Compartment Door (Ref. Fig. 508)
(a)Warning Switch 36WS
1 Position access platform.
2 Open BULK cargo compartment door to gain access to warning switch 36WS.
3 Remove switch cover.
4 Fully close and lock BULK cargo compartment door.
5 Using gage (35) PN 98A52307622000 inserted into inspection hole in barrel lock, make certain that red indicator band (36) is visible.
6 If red indicator band is not visible, carry out required adjustment (Ref. 52-34-11, P. Block 501).
7 Fully open BULK cargo compartment door.
8 Remove warning switch 36WS (Ref. 52-71-11, P. Block 401).
9 Fully close and lock BULK cargo compartment door.
10 Using depth gage (40), check that gap 'J' between upper face of



BULK Cargo Compartment Door - Warning Switch (36WS)
Figure 508

switch mounting flange (41) and face of switch operating bolt (39) is 43.5 ±0.3 mm (1.712 ±0.012 in.).

11 If gap is out of tolerance, proceed as follows:
a Cut lockwire (38), slacken locknut (37) and adjust switch operating bolt (39) to obtain the required clearance.
b Tighten locknut (37), making certain that gap 'J' is not altered and safety locknut (37) with lockwire (38).

12 Fully open BULK cargo compartment door.

13 Install warning switch 36WS (Ref. 52-71-11, P. Block 401).

14 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

15 Fully close and lock BULK cargo compartment door.

16 Remove access platform.

(Ref. Fig. 509)
(Ref. Fig. 510)

(6)Avionics Compartment Doors FR20 (131AZ, 132AZ) (Ref. Fig. 509)

(a)Warning Switches 9WS and 29WS

1 Open FWD cargo compartment door (811).

2 Close and lock LH or RH avionics compartment doors.
NOTE : Make certain that contact surfaces of switch roller and operating plate are clean.

3 Fully press in warning switch 9WS or 29WS manually and, using feeler gage, check that gap 'K' between switch roller and operating plate is 1.0 ±0.4 mm (0.039 ±0.015 in.).

4 If gap is out of tolerance, proceed as follows:
a Adjust gap by slackening switch mounting bracket bolts and moving mounting bracket.
b Tighten bolts making certain that gap 'K' is not altered.

5 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

6 Close and lock FWD cargo compartment door (811).

(7)Avionics Compartment Access Door (121BL) (Ref. Fig. 510)

(a)Warning Switch 11WS

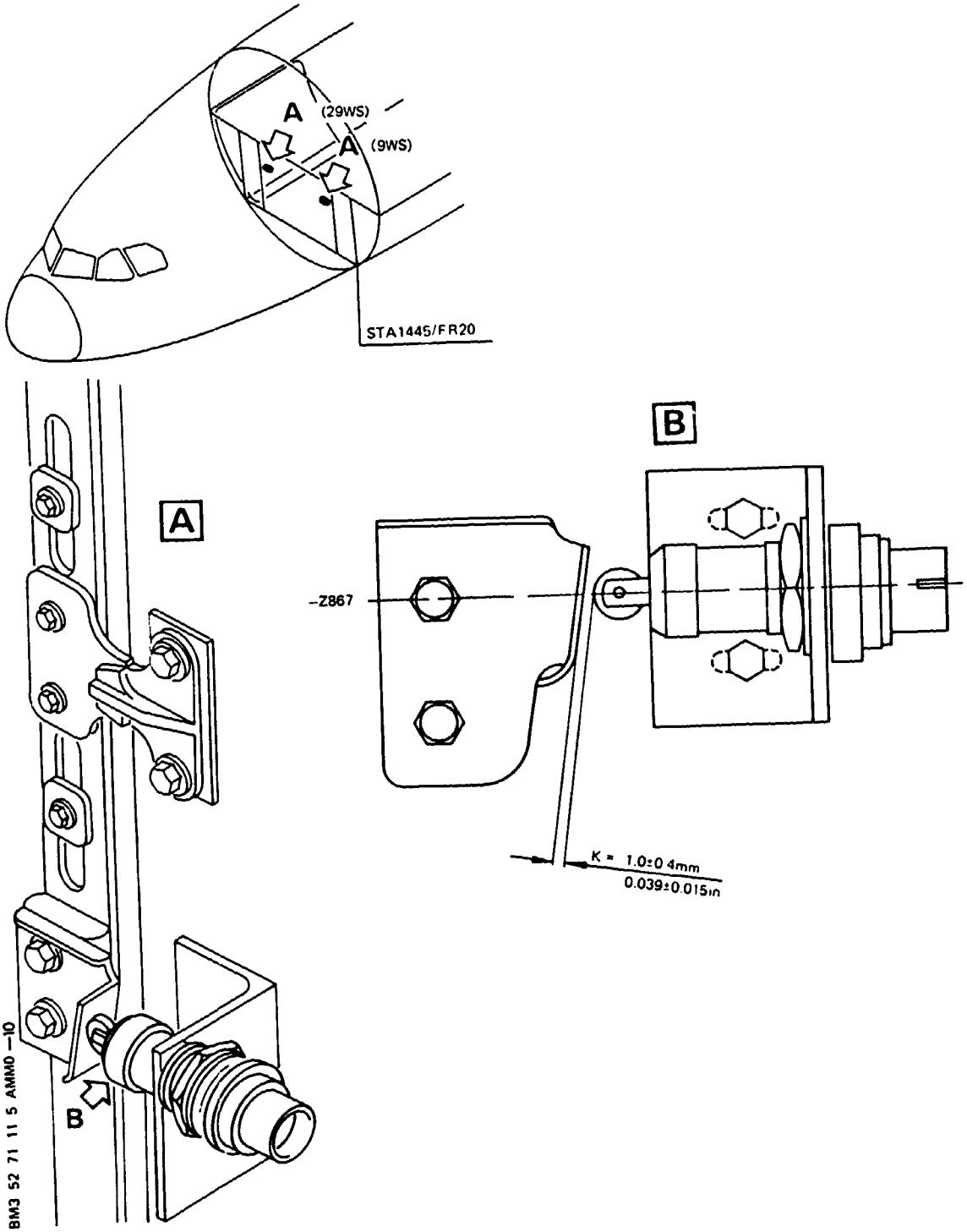
1 Open FWD cargo compartment door (811).

2 Close and lock avionics compartment access door.
NOTE : Make certain that contact surfaces of switch roller and locking roller are clean.

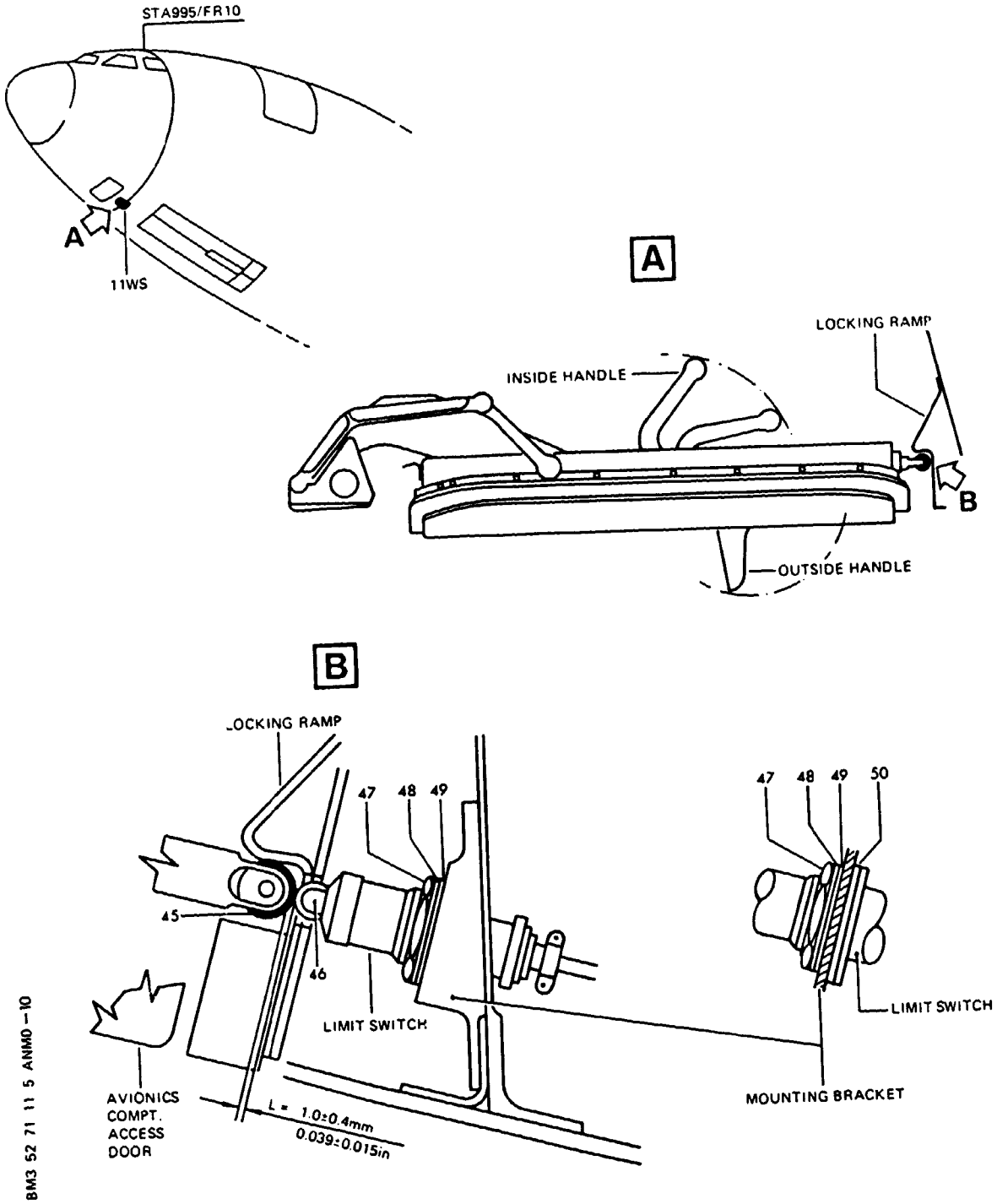
3 Fully press in warning switch 11WS manually and using feeler gage, check that gap 'L' between switch roller (46) and locking roller (45) is 1.0 ± 0.4 mm (0.039 ± 0.015 in.).

4 If gap is out of tolerance, proceed as follows:
a Adjust gap by releasing lock washer (48) and slackening locknut (47).
b Remove warning switch 11WS and change spacing washer (50) until required gap is obtained.
c Apply sealant (Material No. 09-011) to structure and contact face of spacing washer (50).
d Position spacing washer (50) on structure and install warning switch 11WS together with locking washers (48),(49) and nut (47).
e Tighten nut (47) and lock with washer (48).

5 Recheck gap 'L'. If gap 'L' is not correct, repeat steps 4a thru e.



Avionics Compartment Access Doors FR 20 -
131AZ and 132AZ Warning Switches (9WS, 29WS)
Figure 509



Avionics Compartment Access Door 121BL -
Warning Switch (11WS)
Figure 510

6 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
7 Close and lock FWD cargo compartment door (811).
(Ref. Fig. 511)

(8)Lower Access Doors 134AR and 136AR (Ref. Fig. 511)
(a)Warning Switches 10WS and 12WS
1 Warning Switches 10WS and 12WS are not adjustable.

(Ref. Fig. 512)

C. Test
(1)Remove safety clips and tags and close circuit breakers as listed in Para. 3A.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Close and lock all of the following doors:
(a)FWD and AFT Passenger/Crew Doors
(b)Emergency Exits
(c)FWD and AFT Cargo Compartment Doors
(d)BULK Cargo Compartment Door
(e)Avionics Compartment Access Doors FR20 (131AZ, 132AZ)
(f)Avionics Compartment Access Door (121BL)
(g)Lower Access Doors 134AR and 136AR

ACTION	RESULT
1. On ECAM control panel - press CLR P/BSW.	On ECAM Control Panel - DOOR caption goes off.
2. On right (SYS) Display - DOOR page is displayed. (Select DOOR page on ECAM control panel if necessary).	
3. On left (WARN) Display - MEMO page is displayed. (Press CLR P/BSW on ECAM control panel if necessary).	On right (SYS) Display - door symbols are on (green) - door captions are on (white).
WARNING : MAKE CERTAIN THAT EMERGENCY CONTROL HANDLE IS IN DISARMED POSITION.	
4. Unlock and open door corresponding to switch which has been adjusted.	
5. On ECAM maintenance panel 47OVU - press and hold INHIB OVRD P/BSW.	On left (WARN) Display - DOOR warning message is displayed (press CLR P/BSW if necessary) showing: DOOR EXT AVIONICS NOT CLOSED or L FWD COMPT NOT CLOSED or R FWD COMPT NOT CLOSED

ACTION	RESULT
	or **BULK CARGO NOT CLOSED** as applicable On Captain Main Instrument Panel 3VU and First Officer Main Instrument Panel 5VU. - **MASTER CAUTION** lamp is on (amber). On right (SYS) Display - applicable symbol and caption comes on (amber) (call up **DOOR** page on **ECAM** control unit if necessary).
6. On **ECAM** maintenance panel 47OVU - release **INHIB OVRD P/BSW.**	
7. Close and lock door under test.	On right (SYS) Display - applicable door symbol is on (green) and caption is on (white) (Call up **DOOR** page on **ECAM** control unit if necessary).
8. Repeat steps 1. thru 7. for each door on which warning switches have been adjusted.	
9. On **FWD (AFT)** Cargo Compartment Door - unlock operating handle and pull down to its fullest extent.	In the Cockpit - single chime gong sounds after 10 second delay On Captain Main Instrument Panel 3VU and First Officer Main Instrument Panel 5VU. - **MASTER CAUTION** lamp comes on (amber) after 10 second delay. On left **(WARN)** Display - a **DOOR** warning: **FWD (AFT) SW FAULT** comes on after 10 second delay On right (SYS) Display - cargo door symbol is on (amber).
10. Open **FWD (AFT)** Cargo Compartment Door and press **INHIB OVRD P/BSW** on **ECAM** maintenance panel 47OVU.	On left **(WARN)** Display - a **DOOR** warning: **FWD (AFT) CARGO DOOR NOT CLOSED** comes on On Captain Main Instrument 3VU

ACTION	RESULT
	and First Officer Main Instrument Panel 5VU - **MASTER CAUTION** lamp is on (amber). On right **(SYS)** Display - cargo door symbol is on (amber).
11.Return operating handle to recess and lock.	On left **(WARN)** Display - **DOOR** warning changes after 10 seconds to **FWD (AFT) CARGO SW FAULT.**
12.Unlock operating handle from its recess and close and lock **FWD (AFT)** Cargo Compartment Door.	On left **(WARN)** Display - all cargo door warnings off On right **(SYS)** Display - cargo door symbol is on (green) (call up **DOOR** page on **ECAM** control unit if necessary).
13.On **ECAM** control panel - press **CLR P/BSW.**	

D. Close-Up

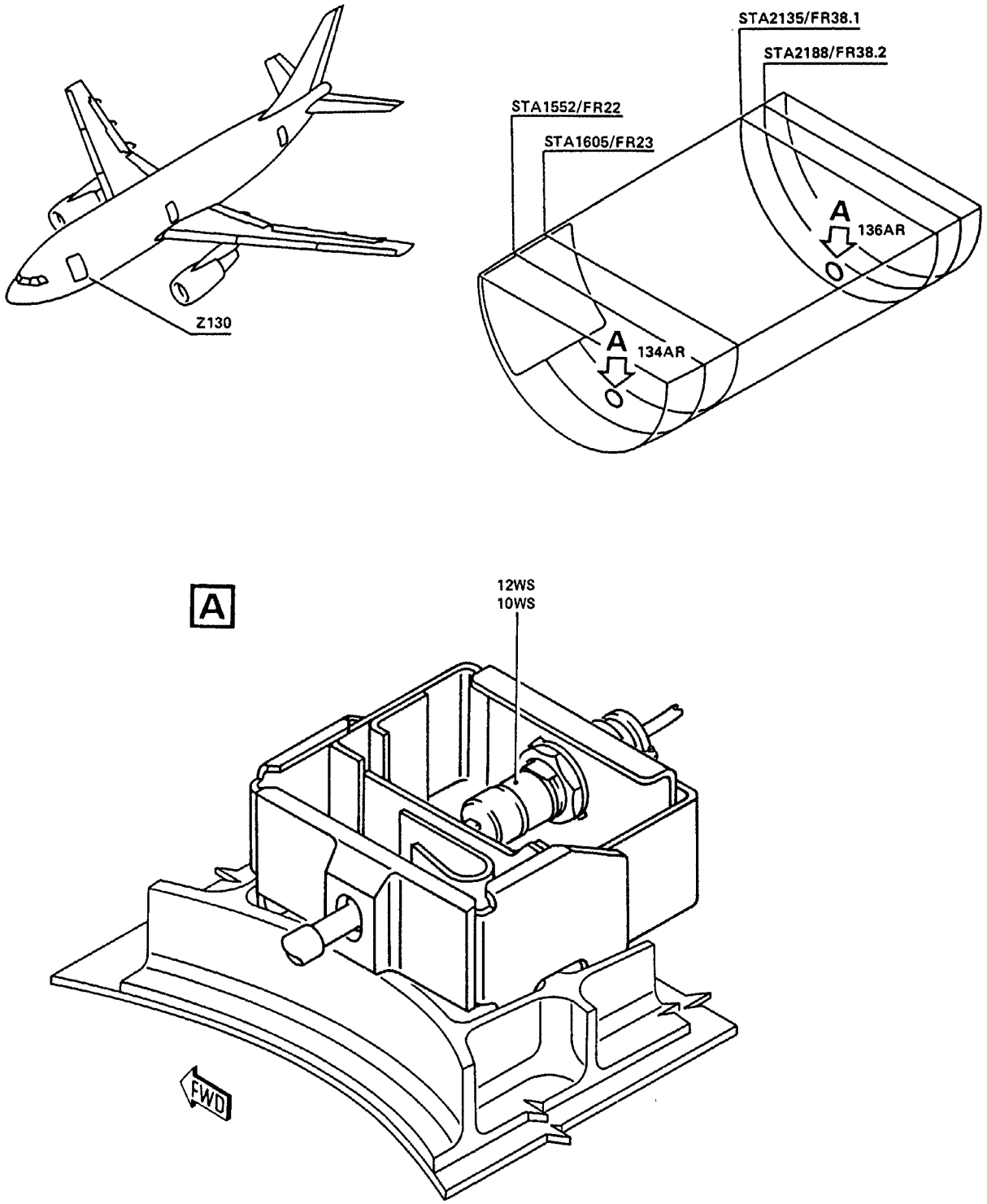
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(2)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

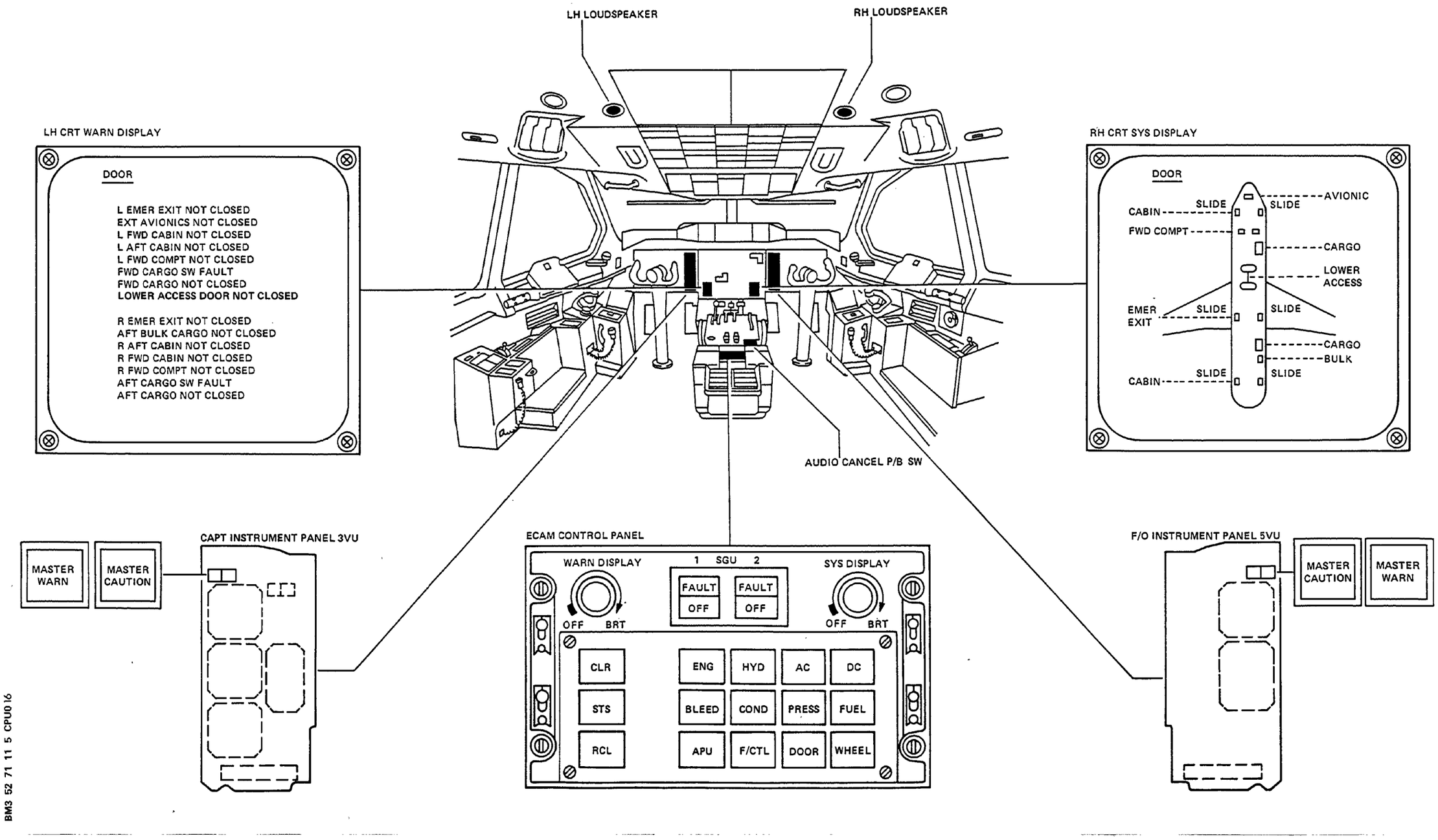
(3)Arm door damper and emergency operation cylinder and activate door warning system (Ref. 52-10-00, P. Block 301 and Ref. 52-23-00, P. Block 301).

(4)Remove access platform.



BM3 52 71 11 5 AOM0-15

Lower Access Doors 134AR and 136AR -
Warning Switches (10WS, 12WS)
Figure 511



Door Warning System - Cockpit Displays
Figure 512

EMERGENCY ESCAPE SLIDE RELEASE WARNING - DESCRIPTION AND OPERATION

1. General

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

EMERGENCY ESCAPE SLIDE RELEASE AND RESIDUAL-PRESSURE WARNING DESCRIPTION AND OPERATION

1. General

**ON A/C ALL

(Ref. Fig. 001)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 002)

R **ON A/C 001-104,

Post SB 52-2039 For A/C 001-003,

R Post SB 52-2056 For A/C 001-104,

(Ref. Fig. 003)

R **ON A/C 105-200,

R Post SB 52-2056 For A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

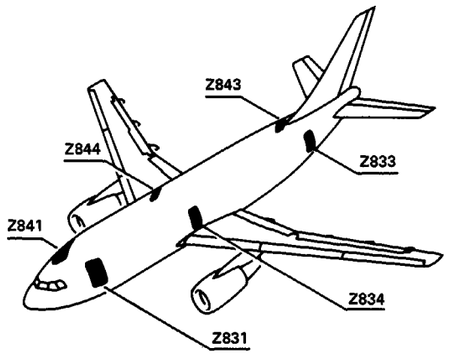
R (Ref. Fig. 004)

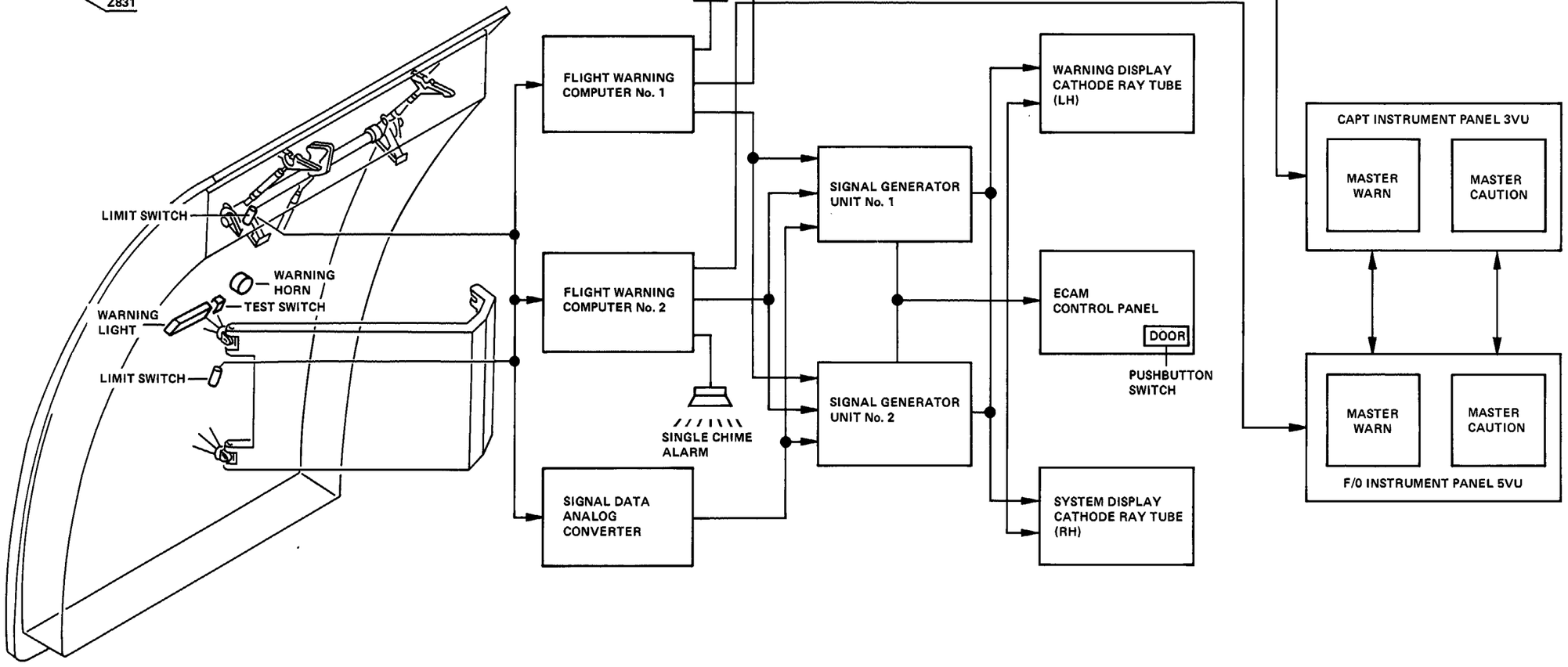
**ON A/C 001-003,

The emergency escape slide release warning system monitors, by means of limit switches, the FWD and AFT passenger/crew doors and the emergency exits. Aural and visual indications are provided individually at each monitored door and also in the cockpit, aurally via the loudspeakers and visually

INTENTIONALLY BLANK

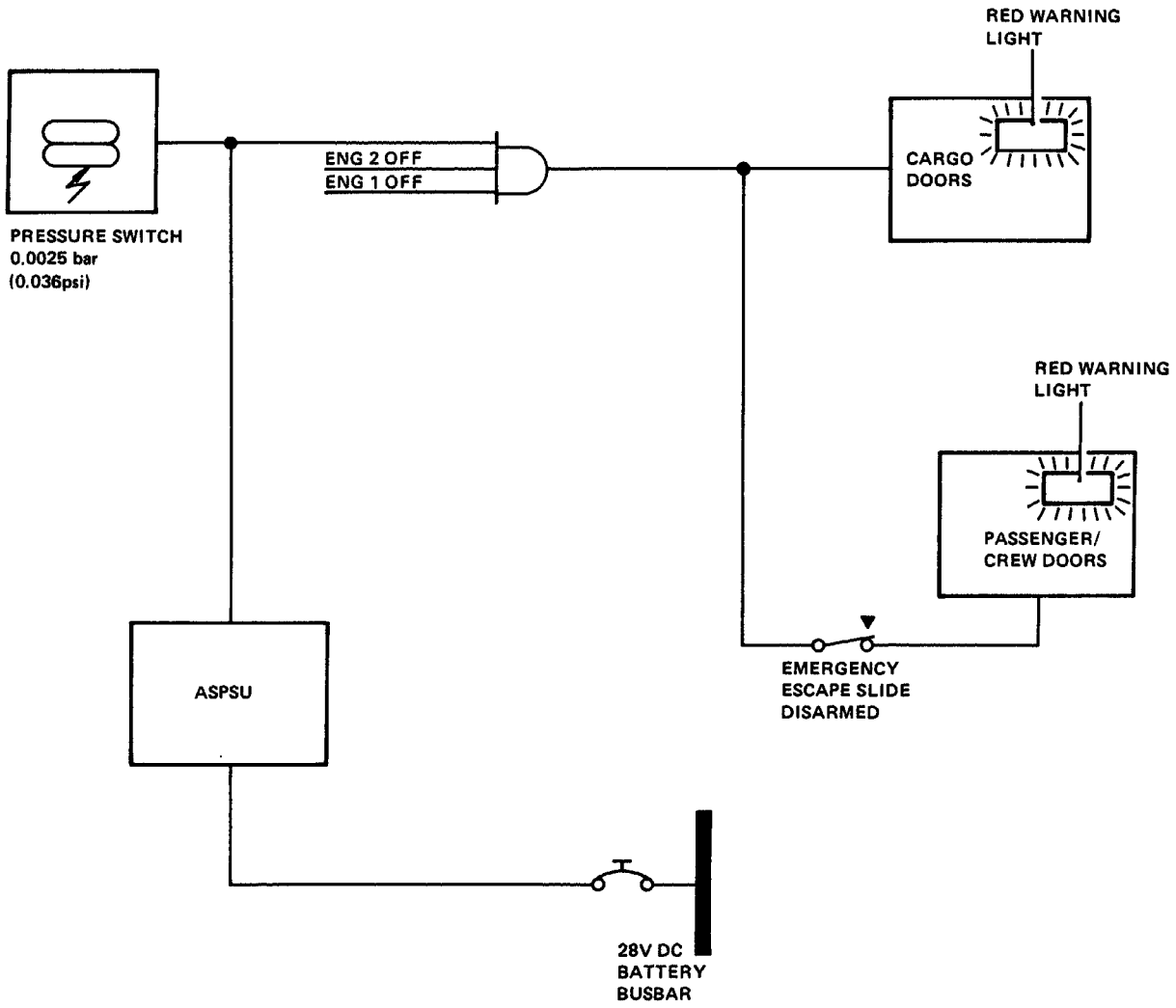
Printed in France





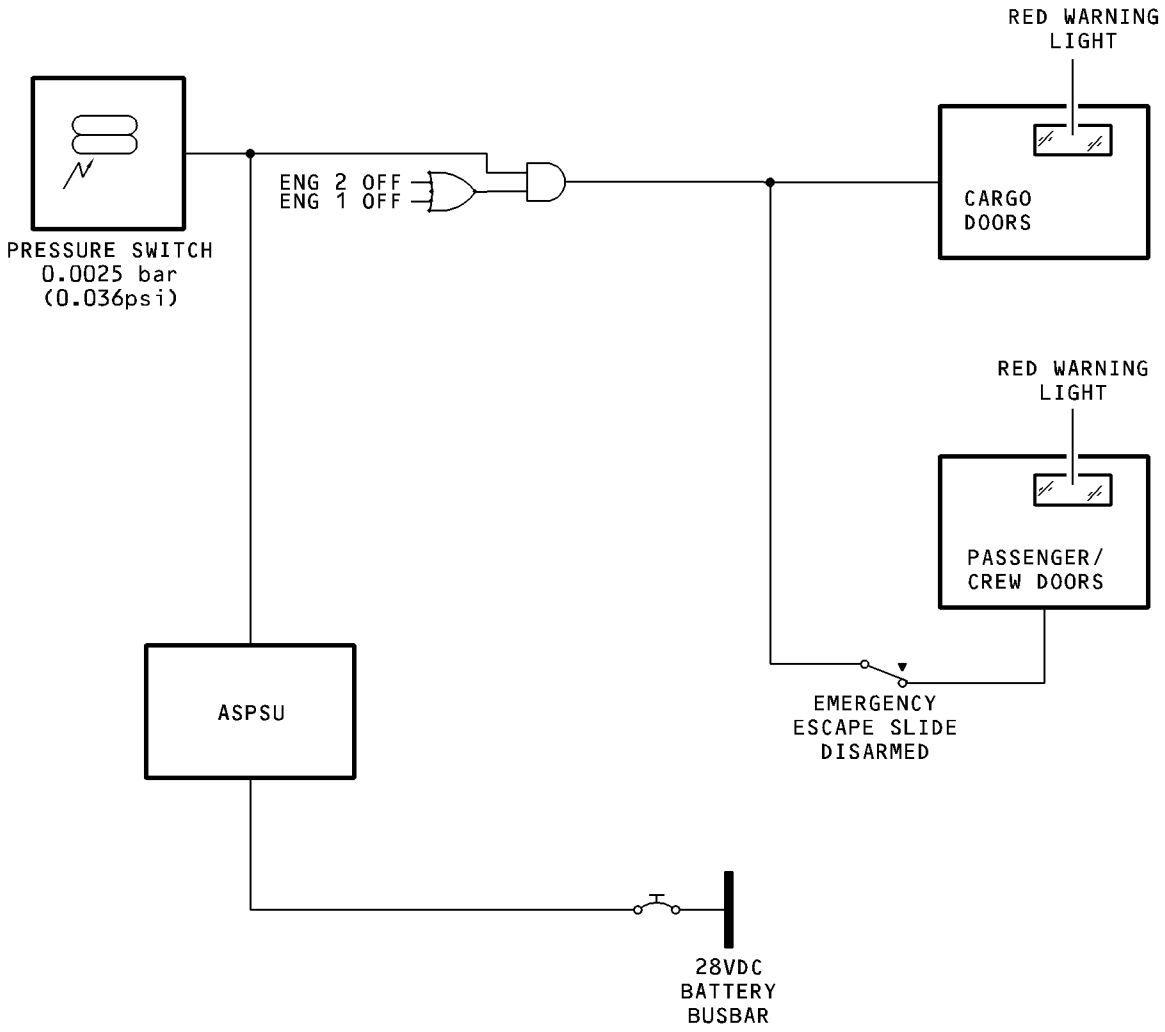
BM3 52 73 00 0 BAM0 22

Block Schematic
Figure 001



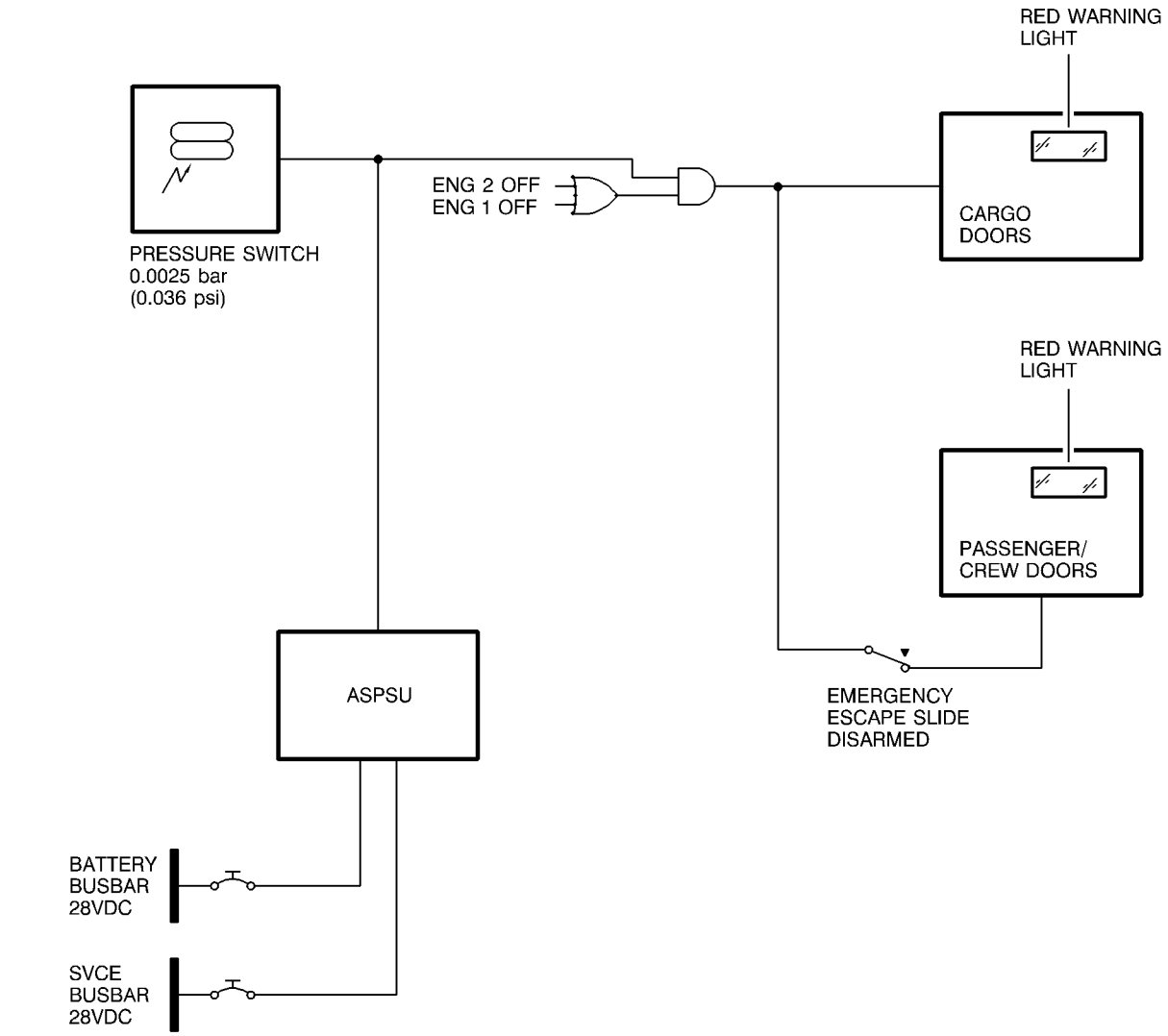
BM6 52 73 00 0 ABM0 00

Block Schematic
Figure 002



BM6 52 73 00 0 ABP0 00

Block Schematic
Figure 003



BM6 52 73 00 0 ABT0 00

R Block Schematic
Figure 004

by the MASTER CAUTION pushbutton switch on the captain main instrument panel 3VU and the first officer main instrument panel 5VU and cathode ray tubes (CRT) in conjunction with the door warning system.
When a monitored door is closed and locked and the escape slide is armed, any attempt to open or unlock the door will cause the limit switches to close, the warning light to come on and the warning horn to be sounded at the door. Simultaneously the signals are monitored by the flight warning computers (FWC) of the electronic centralized aircraft monitor (ECAM), the MASTER CAUTION pushbutton switch will come on (amber) and on the RH System Display CRT the title and the image of the relevant monitored door will change into amber.
When the door is again correctly closed and locked, the limit switches are again opened, the warning light goes off and the warning horn will cease. The output of the FWC will cause the title to be shown in white and the image to be shown in green on the RH System Display CRT. The MASTER CAUTION will remain amber until the CLEAR P/BSW on the ECAM control panel or MASTER CAUTION pushbutton switch is pressed.

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,

A. Emergency Escape-Slide-Release Warning System
The emergency escape slide release warning system monitors, by means of limit switches, the FWD and AFT passenger/crew doors and the emergency exits. Aural and visual indications are provided individually at each monitored door and also in the cockpit, aurally via the loudspeakers and visually by the MASTER CAUTION pushbutton switch on the captain main instrument panel 3VU and the first officer main instrument panel 5VU and cathode ray tubes (CRT) in conjunction with the door warning system.
When a monitored door is closed and locked and the escape slide is armed, any attempt to open or unlock the door will cause the limit switches to close, the warning light to come on and the warning horn to be sounded at the door. Simultaneously, the signals are monitored by the Flight Warning Computers (FWC) of the Electronic Centralized Aircraft Monitor (ECAM), the MASTER CAUTION pushbutton switch will come on (amber), and on the RH System Display CRT the title and the image of the relevant monitored door will change into amber.
When the door is again correctly closed and locked, the limit switches are again opened, the warning light goes off and the warning horn will cease. The output of the FWC will cause the title to be shown in white and the image to be shown in green on the RH System Display CRT. The MASTER CAUTION will remain amber until the CLEAR P/BSW on the ECAM control panel or the MASTER CAUTION pushbutton switch is pressed.

B. Residual-Pressure Warning System
The Residual-Pressure Warning System (RPWS) monitors the existence of residual cabin pressure. This condition is visually indicated inside and outside of the cabin and outside of the FWD and AFT cargo-compartment

doors. The warnings are evident as red lights at:
- the passenger/crew doors,
- the FWD and AFT cargo-compartment doors.

The residual cabin pressure is measured by a pressure switch.
The RPWS also has an Autonomous Standby Power Supply Unit (ASPSU).
If a complete loss of electrical power (of the battery busbar) should occur, the ASPSU supplies 28 V DC to the RPWS.
The RPWS contains the following components:
- one pressure switch 71WN,
- red flashing lights,
- one ASPSU.

**ON A/C 101-200,

A. Emergency Escape-Slide-Release Warning System
The emergency escape slide release warning system monitors, by means of limit switches, the FWD and AFT passenger/crew doors and the emergency exits. Aural and visual indications are provided individually at each monitored door and also in the cockpit, aurally via the loudspeakers and visually by the MASTER CAUTION pushbutton switch on the captain main instrument panel 3VU and the first officer main instrument panel 5VU and cathode ray tubes (CRT) in conjunction with the door warning system.
When a monitored door is closed and locked and the escape slide is armed, any attempt to open or unlock the door will cause the limit switches to close and the warning light at the door to come on.
Simultaneously, the signals are monitored by the Flight Warning Computers (FWC) of the Electronic Centralized Aircraft Monitor (ECAM), the MASTER CAUTION pushbutton switch will come on (amber), and on the RH System Display CRT the title and the image of the relevant monitored door will change into amber.
When the door is again correctly closed and locked, the limit switches are again opened and the warning light goes off.
The output of the FWC will cause the title to be shown in white and the image to be shown in green on the RH System Display CRT. The MASTER CAUTION will remain amber until the CLEAR P/BSW on the ECAM control panel or the MASTER CAUTION pushbutton switch is pressed.

B. Residual-Pressure Warning System
The Residual-Pressure Warning System (RPWS) monitors the existence of residual cabin pressure. This condition is visually indicated inside and outside of the cabin and outside of the FWD and AFT cargo-compartment doors. The warnings are evident as red lights at:
- the passenger/crew doors,
- the FWD and AFT cargo-compartment doors.

The residual cabin pressure is measured by a pressure switch.
The RPWS also has an Autonomous Standby Power Supply Unit (ASPSU).
If a complete loss of electrical power (of the battery busbar) should occur, the ASPSU supplies 28 V DC to the RPWS.
The RPWS contains the following components:
- one pressure switch 71WN,

- red flashing lights,
- one ASPSU.

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R A. Emergency Escape-Slide-Release Warning System
R The emergency escape slide release warning system monitors, by means of
R limit switches, the FWD and AFT passenger/crew doors and the emergency
R exits. Aural and visual indications are provided individually at each moni-
R tored door and also in the cockpit, aurally via the loudspeakers and
R visually by the MASTER CAUTION pushbutton switch on the captain main
R instrument panel 3VU and the first officer main instrument panel 5VU and
R cathode ray tubes (CRT) in conjunction with the door warning system.
R When a monitored door is closed and locked and the escape slide is
R armed, any attempt to open or unlock the door will cause the limit
R switches to close, the warning light to come on and the warning horn to
R be sounded at the door. Simultaneously, the signals are monitored by the
R Flight Warning Computers (FWC) of the Electronic Centralized Aircraft
R Monitor (ECAM), the MASTER CAUTION pushbutton switch will come on (amber),
R and on the RH System Display CRT the title and the image of the relevant
R monitored door will change into amber.
R When the door is again correctly closed and locked, the limit switches
R are again opened, the warning light goes off and the warning horn will
R cease.
R The output of the FWC will cause the title to be shown in white and the
R image to be shown in green on the RH System Display CRT. The MASTER
R CAUTION will remain amber until the CLEAR P/BSW on the ECAM control panel
R or the MASTER CAUTION pushbutton switch is pressed.

R B. Residual-Pressure Warning System
R The Residual-Pressure Warning System (RPWS) monitors the existence
R of residual cabin pressure. This condition is visually indicated inside
R and outside of the cabin and outside of the FWD and AFT cargo-compartment
R doors. The warnings are evident as red lights at:
R - the passenger/crew doors,
R - the FWD and AFT cargo-compartment doors.
R The residual cabin pressure is measured by a pressure switch.
R The RPWS also has an Autonomous Standby Power Supply Unit (ASPSU).
R If a complete loss of electrical power (of the battery and service busbars)
R occurs, the ASPSU supplies 28 V DC to the RPWS.
R The RPWS contains the following components:
R - one pressure switch 71WN,
R - red flashing lights,
R - one ASPSU.

**ON A/C 001-003,

2. Component Location

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

2. Component Location

**ON A/C 001-003,

(Ref. Fig. 005)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 006)

**ON A/C 001-003,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
7WN	WARNING LIGHT		831		52-73-11
8WN	WARNING LIGHT		841		52-73-11
9WN	LIMIT SWITCH		831		52-73-13
10WN	LIMIT SWITCH		841		52-73-13
11WN	WARNING HORN		831		52-73-12
12WN	WARNING HORN		841		52-73-12
13WN	LIMIT SWITCH		831		52-73-13
14WN	LIMIT SWITCH		841		52-73-13
23WN	WARNING LIGHT		834		52-73-11
24WN	WARNING LIGHT		844		52-73-11
25WN	LIMIT SWITCH		834		52-73-13
26WN	LIMIT SWITCH		844		52-73-13
27WN	WARNING HORN		834		52-73-12
28WN	WARNING HORN		844		52-73-12
29WN	LIMIT SWITCH		834		52-73-13
30WN	LIMIT SWITCH		844		52-73-13
31WN	WARNING LIGHT		833		52-73-11
32WN	WARNING LIGHT		843		52-73-11
33WN	LIMIT SWITCH		833		52-73-13
34WN	LIMIT SWITCH		843		52-73-13
35WN	WARNING HORN		833		52-73-12

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
36WN	WARNING HORN		843		52-73-12
37WN	LIMIT SWITCH		833		52-73-13
38WN	LIMIT SWITCH		843		52-73-13
39WN	TEST SWITCH		831		52-73-14
40WN	TEST SWITCH		841		52-73-14
43WN	TEST SWITCH		834		52-73-14
44WN	TEST SWITCH		844		52-73-14
45WN	TEST SWITCH		833		52-73-14
46WN	TEST SWITCH		843		52-73-14

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
7WN	WARNING LIGHT		831		52-73-11
8WN	WARNING LIGHT		841		52-73-11
9WN	LIMIT SWITCH		831		52-73-13
10WN	LIMIT SWITCH		841		52-73-13
11WN	WARNING HORN		831		52-73-12
12WN	WARNING HORN		841		52-73-12
13WN	LIMIT SWITCH		831		52-73-13
14WN	LIMIT SWITCH		841		52-73-13
23WN	WARNING LIGHT		834		52-73-11
24WN	WARNING LIGHT		844		52-73-11
25WN	LIMIT SWITCH		834		52-73-13
26WN	LIMIT SWITCH		844		52-73-13
27WN	WARNING HORN		834		52-73-12
28WN	WARNING HORN		844		52-73-12
29WN	LIMIT SWITCH		834		52-73-13
30WN	LIMIT SWITCH		844		52-73-13
31WN	WARNING LIGHT		833		52-73-11
32WN	WARNING LIGHT		843		52-73-11
33WN	LIMIT SWITCH		833		52-73-13
34WN	LIMIT SWITCH		843		52-73-13
35WN	WARNING HORN		833		52-73-12
36WN	WARNING HORN		843		52-73-12
37WN	LIMIT SWITCH		833		52-73-13
38WN	LIMIT SWITCH		843		52-73-13
39WN	TEST SWITCH		831		52-73-14
40WN	TEST SWITCH		841		52-73-14
43WN	TEST SWITCH		834		52-73-14
44WN	TEST SWITCH		844		52-73-14
45WN	TEST SWITCH		833		52-73-14

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
	46WN	TEST SWITCH		843		52-73-14
R	70WN	AUTONOMOUS STANDBY POWER SUPPLY UNIT		121		52-73-18
R	71WN	PRESSURE SWITCH		121		52-73-17
	72WN	WARNING LIGHT		811		52-73-16
	73WN	WARNING LIGHT		831		52-73-15
	74WN	WARNING LIGHT		841		52-73-15
	79WN	WARNING LIGHT		833		52-73-15
	80WN	WARNING LIGHT		843		52-73-15
	82WN	WARNING LIGHT		812		52-73-16

**ON A/C 105-200,

Post SB 52-2068 For A/C 105-200,

FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
7WN	WARNING LIGHT		831		52-73-11
8WN	WARNING LIGHT		841		52-73-11
9WN	LIMIT SWITCH		831		52-73-13
10WN	LIMIT SWITCH		841		52-73-13
11WN	WARNING HORN		831		52-73-12
12WN	WARNING HORN		841		52-73-12
13WN	LIMIT SWITCH		831		52-73-13
14WN	LIMIT SWITCH		841		52-73-13
23WN	WARNING LIGHT		834		52-73-11
24WN	WARNING LIGHT		844		52-73-11
25WN	LIMIT SWITCH		834		52-73-13
26WN	LIMIT SWITCH		844		52-73-13
27WN	WARNING HORN		834		52-73-12
28WN	WARNING HORN		844		52-73-12
29WN	LIMIT SWITCH		834		52-73-13
30WN	LIMIT SWITCH		844		52-73-13
31WN	WARNING LIGHT		833		52-73-11
32WN	WARNING LIGHT		843		52-73-11
33WN	LIMIT SWITCH		833		52-73-13
34WN	LIMIT SWITCH		843		52-73-13
35WN	WARNING HORN		833		52-73-12
36WN	WARNING HORN		843		52-73-12
37WN	LIMIT SWITCH		833		52-73-13
38WN	LIMIT SWITCH		843		52-73-13
39WN	TEST SWITCH		831		52-73-14
40WN	TEST SWITCH		841		52-73-14
43WN	TEST SWITCH		834		52-73-14
44WN	TEST SWITCH		844		52-73-14
45WN	TEST SWITCH		833		52-73-14

	FIN	FUNCTIONAL DESIGNATION	PANEL	ZONE	ACCESS DOOR	ATA REF
	46WN	TEST SWITCH		843		52-73-14
R	70WN	AUTONOMOUS STANDBY POWER SUPPLY UNIT		121		52-73-18
R	71WN	PRESSURE SWITCH		121		52-73-17
	72WN	WARNING LIGHT		811		52-73-16
	73WN	WARNING LIGHT		831		52-73-15
	74WN	WARNING LIGHT		841		52-73-15
	79WN	WARNING LIGHT		833		52-73-15
	80WN	WARNING LIGHT		843		52-73-15
	82WN	WARNING LIGHT		812		52-73-16

**ON A/C ALL

3. Description
(Ref. Fig. 007)

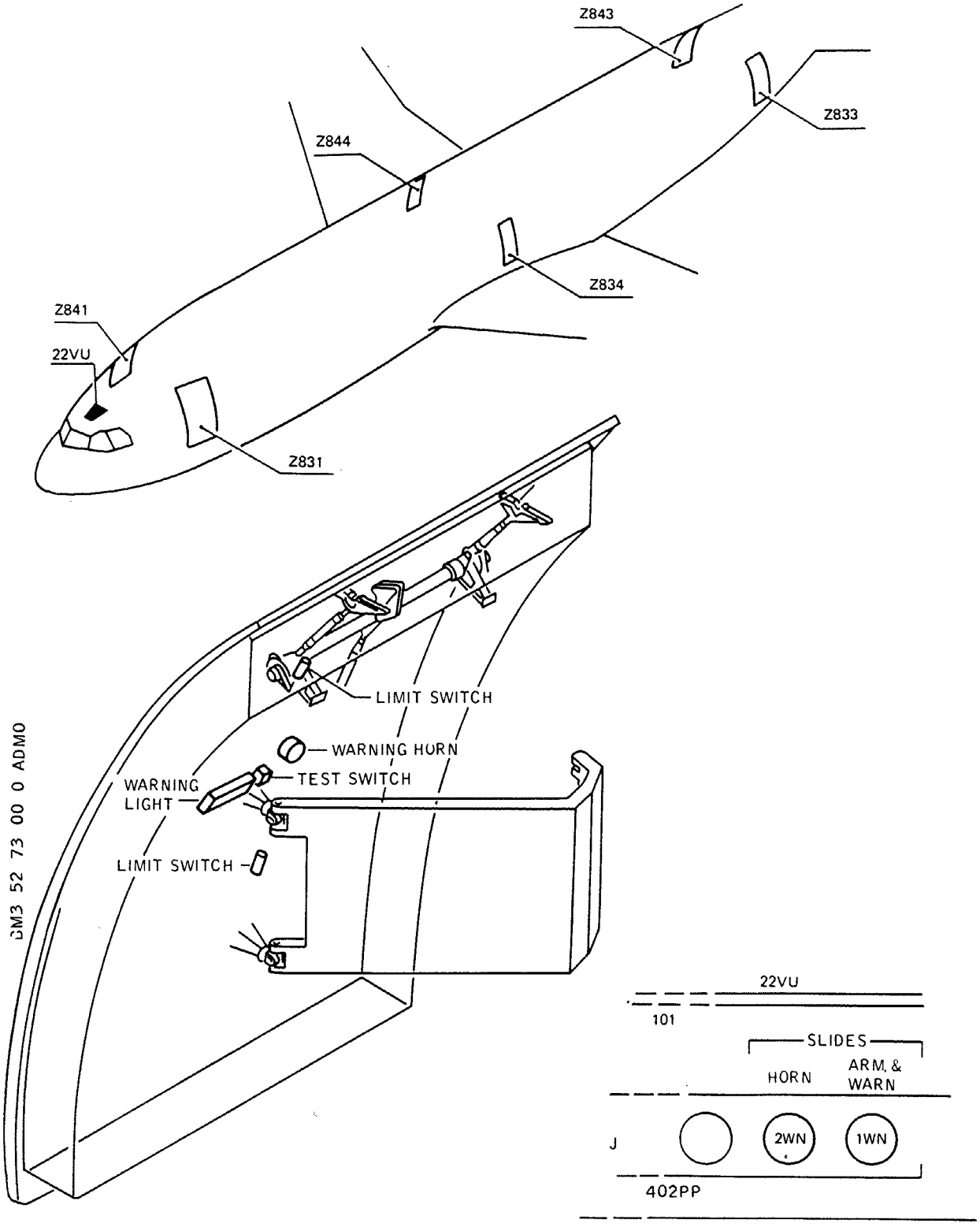
**ON A/C 001-003,

A warning circuit is installed in the LH and RH, FWD and AFT passenger/crew doors and emergency exits. The circuit comprises two limit switches, a flashing warning light, a warning horn and a test switch supplied from the 28 V DC BATT BUS 402PP via circuit breakers 1WN and 2WN.
One limit switch is operated by the door locking mechanism and the second by the emergency escape-slide-release mechanism. The contacts of both switches are connected in series.
Should any attempt be made to unlock a door when the emergency control handle is in the "ARMED" position, the switches will close and 28 V DC will be connected to the warning light and warning horn of the associated door.
Each circuit is monitored by the FWC of the ECAM system and displayed on the CRT and amber by the MASTER CAUTION pushbutton switches in conjunction with the door warning system.
A test switch is incorporated within each circuit, in parallel with the limit switches, which, when pressed, connects the 28 V DC to the warning light and warning horn to enable individual testing of the circuit.

4. Component Description

A. Circuit Breakers (1WN, 2WN)
The circuit breakers (1WN,2WN) are rated at 5A. When closed, they route 28 V DC from BATT BUS 402PP to energize each circuit.

B. Limit Switches (9WN, 10WN, 13WN, 14WN, 25WN, 26WN, 29WN, 30WN, 33WN, 34WN, 37WN, 38WN)
Two limit switches to each door circuit are connected in series.
The limit switches are normally open and close when an attempt is made to unlock or open a door when the emergency control handle is in the "ARMED" position. They route 28 V DC to the warning horn, the warning

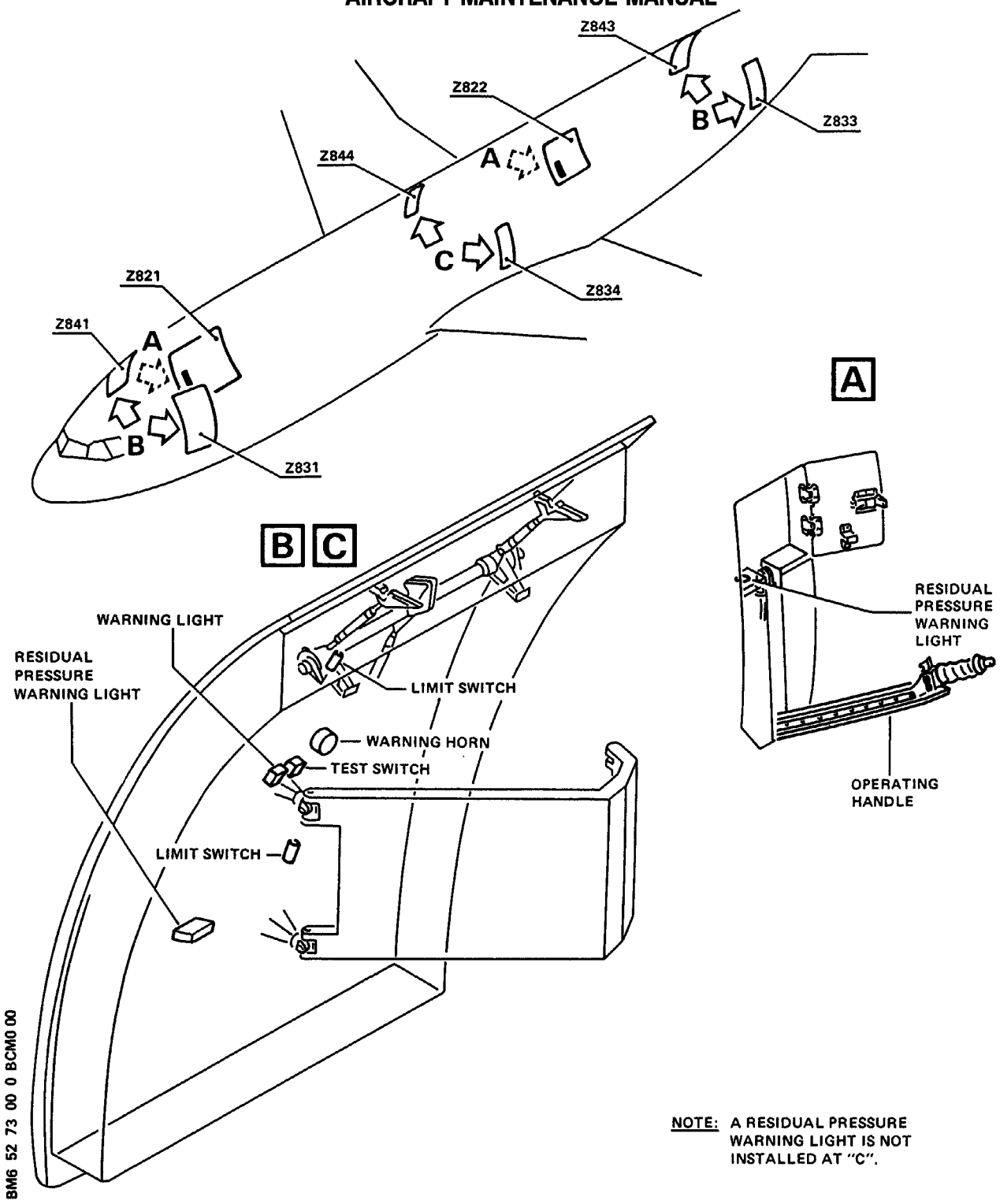


Emergency Escape Slide Release Warning
Component Location
Figure 005

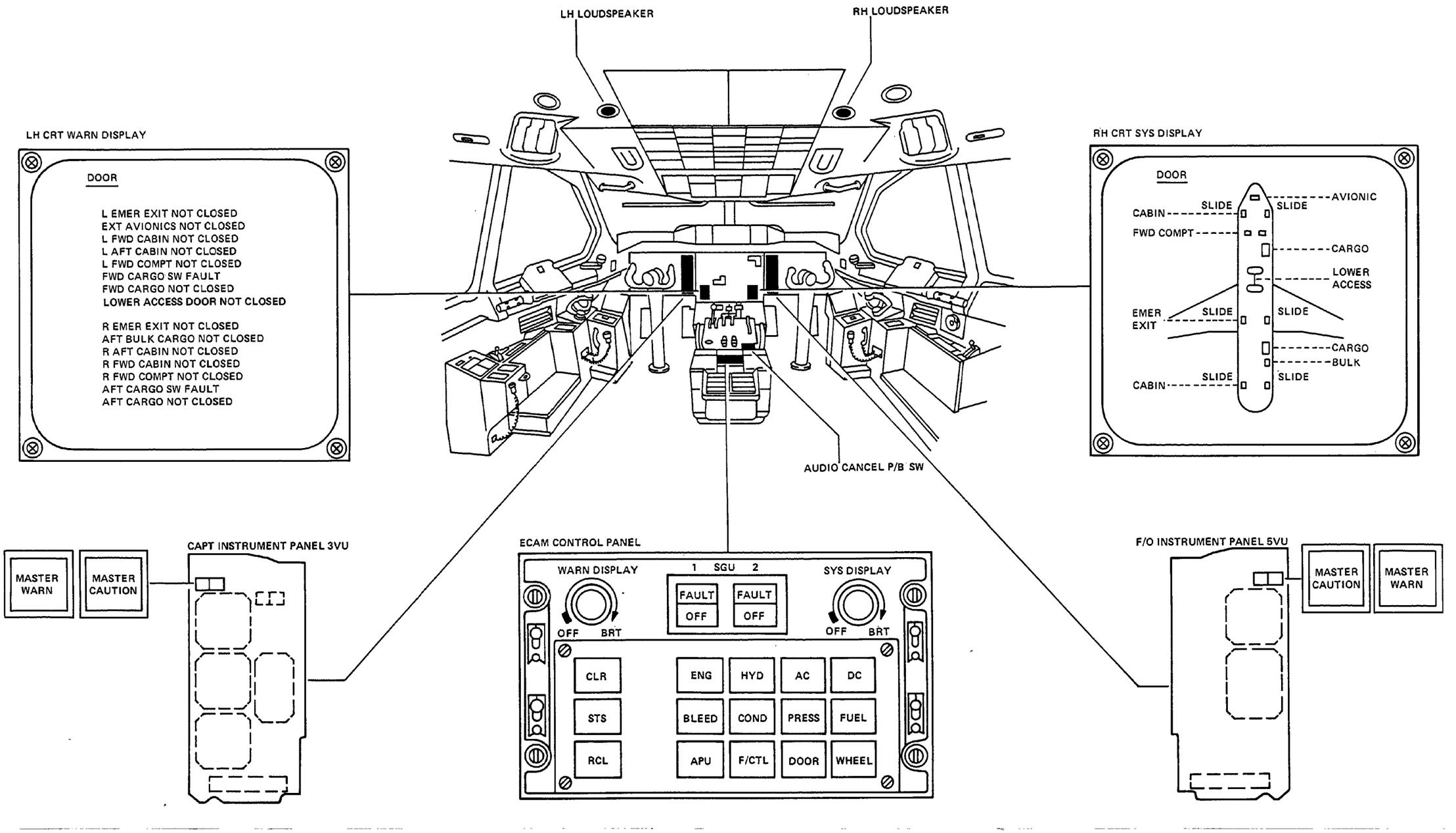
R EFFECTIVITY: 001-003,

PIA

Printed in France



Emergency Escape Slide Release and Residual-Pressure Warning
Component Location
Figure 006



Cockpit Displays
Figure 007

light and also to the FWC's.

C. Warning Lights (7WN, 8WN, 23WN, 24WN, 31WN, 32WN)
One warning light is located at each monitored door. The warning light flashes when both limit switches in the circuit are closed.

D. Warning Horns (11WN, 12WN, 27WN, 28WN, 35WN, 36WN)
One warning horn is located at each monitored door. The warning horn is activated when both limit switches in the circuit are closed.

E. Test Switches (39WN, 40WN, 43WN, 44WN, 45WN, 46WN)
The test switches are used to test the correct function of each individual warning light and warning horn. When pressed, the test switches connect 28 V DC to the relevant warning light and horn.

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,

A. Emergency Escape-Slide-Release Warning System
Warning circuits are installed in the LH and RH, FWD and AFT passenger/crew doors and in the emergency exits. Each circuit comprises two limit switches, a flashing warning light, a warning horn and a test switch supplied from the 28 V DC BATT BUS 402PP via circuit breakers 1WN and 2WN.
One limit switch is operated by the door locking mechanism and the second by the emergency escape-slide-release mechanism. The contacts of both switches are connected in series.
Should any attempt be made to unlock a door when the emergency control handle is in the "ARMED" position, the switches will close and 28 V DC will be connected to the warning light and warning horn of the associated door.
Each circuit is monitored by the flight warning computers of the ECAM system and displayed on the CRT and amber by the MASTER CAUTION pushbutton switches in conjunction with the door warning system.
A test switch is incorporated within each circuit, in parallel with the limit switches, which, when pressed, connects 28 V DC to the warning light and warning horn to enable individual testing of the circuit.

B. Residual-Pressure Warning System
When there is an existence of residual pressure in the cabin a warning is visually given at the passenger/crew doors.
The warning is visible inside and outside the aircraft as a flashing red light when:
- the escape-slide is DISARMED,
- engines 1 and 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

When residual pressure exists in the FWD or AFT cargo compartment, a warning appears at the related cargo compartment door.
The warning is visible outside the aircraft as a flashing red light when:

- the access panels 677FR (812CR) are in the open position,
- engines 1 and 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

The ASPSU, which is a rechargeable battery supply, provides 28 V DC power to the RPWS when there is:

- no power available on the battery busbar, and
- residual differential pressure is more than 0.0025 bar (0.0362 psi).

4. Component Description

A. Circuit Breakers (1WN, 2WN)
The circuit breakers (1WN,2WN) are rated at 5A. When closed, they route 28 V DC from BATT BUS 402PP to energize each circuit.

B. Limit Switches (9WN, 10WN, 13WN, 14WN, 25WN, 26WN, 29WN, 30WN, 33WN, 34WN, 37WN, 38WN)
Two limit switches to each door circuit are connected in series. The limit switches are normally open and close when an attempt is made to unlock or open a door when the emergency control handle is in the "ARMED" position. They route 28 V DC to the warning horn, the warning light and also to the flight warning computers.

C. Warning Lights (7WN, 8WN, 23WN, 24WN, 31WN, 32WN)
One warning light is located at each monitored door. The warning light flashes when both limit switches in the circuit are closed.

D. Warning Horns (11WN, 12WN, 27WN, 28WN, 35WN, 36WN)
One warning horn is located at each monitored door. The warning horn is activated when both limit switches in the circuit are closed.

E. Test Switches (39WN, 40WN, 43WN, 44WN, 45WN, 46WN)
The test switches are used to test the correct function of each individual warning light and warning horn. When pressed, the test switches connect 28 V DC to the relevant warning light and horn.

F. Pressure Switch
The pressure switch 71WN is installed between STA1393/FR19 and STA1496/FR20 in the electronic bay. The pressure switch 71WN surveys the residual pressure in the cabin and in the FWD and AFT cargo compartments. An output signal is transmitted by the pressure switch 71WN when there is a differential pressure between the cabin/cargo compartments and the outside which exceeds 0.0025 bar (0.0362 psi).

G. Flashing Unit
Each passenger/crew door, FWD and AFT cargo-compartment door has one flashing unit (red warning light). The red warning light commences to flash when the residual differential pressure exceeds 0.0025 bar (0.0362 psi).
To prevent flashing of the red warning lights, they are deactivated when the escape-slides are activated.

H. Autonomous Stand-By Power Supply Unit (ASPSU)
The ASPSU is installed between STA1393/FR19 and STA1446/FR20 on the RH side of the aircraft in the electronics bay.
If a power failure (of the battery busbar) should occur, an internal monitoring device switches the ASPSU to the RPWS. The ASPSU then supplies 28 V DC to the RPWS for maximum 1 hour under normal temperature conditions.

R **ON A/C 101-200,

A. Emergency Escape-Slide-Release Warning System
Warning circuits are installed in the LH and RH, FWD and AFT passenger/crew doors and emergency exits. Each circuit comprises two limit switches, a flashing warning light and a test switch supplied from the 28 V DC BATT BUS 402PP via circuit breakers 1WN and 2WN.
One limit switch is operated by the door locking mechanism and the second by the emergency escape-slide-release mechanism. The contacts of both switches are connected in series.
Should any attempt be made to unlock a door when the emergency control handle is in the "ARMED" position, the switches will close and 28 V DC will be connected to the warning light of the associated door.
Each circuit is monitored by the flight warning computers of the ECAM system and displayed on the CRT and amber by the MASTER CAUTION pushbutton switches in conjunction with the door warning system.
A test switch is incorporated within each circuit, in parallel with the limit switches, which, when pressed, connects 28 V DC to the warning light to enable individual testing of the circuit.

B. Residual-Pressure Warning System
When there is an existence of residual pressure in the cabin, a warning is visually given at the passenger/crew doors.
The warning is visible inside and outside the aircraft as a flashing red light when:
- the escape-slide is DISARMED,
- engines 1 and 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

When residual pressure exists in the FWD or AFT cargo compartment, a warning appears at the related cargo compartment door.
The warning is visible outside the aircraft as a flashing red light when:
- the access panels 677FR (812CR) are in the open position,
- engines 1 and 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

The ASPSU, which is a rechargeable battery supply, provides 28 V DC power to the RPWS when there is:
- no power available on the battery busbar, and
- residual differential pressure is more than 0.0025 bar (0.0362 psi).

4. Component Description

A. Circuit Breakers (1WN, 2WN)

The circuit breakers (1WN,2WN) are rated at 5A. When closed, they route 28 V DC from BATT BUS 402PP to energize each circuit.

B. Limit Switches (9WN, 10WN, 13WN, 14WN, 25WN, 26WN, 29WN, 30WN, 33WN, 34WN, 37WN, 38WN)
Two limit switches to each door circuit are connected in series. The limit switches are normally open and close when an attempt is made to unlock or open a door when the emergency control handle is in "ARMED" position. They route 28 V DC to the warning light and also the to the flight warning computers.

C. Warning Lights (7WN, 8WN, 23WN, 24WN, 31WN, 32WN)
One warning light is located at each monitored door. The warning light
R flashes when both limit switches in the circuit are closed.

D. Warning Horns (11WN, 12WN, 27WN, 28WN, 35WN, 36WN)
One warning horn is located at each monitored door.

NOTE : ELECTRICAL WIRES ARE NOT CONNECTED TO WARNING HORNS.

E. Test Switches (39WN, 40WN, 43WN, 44WN, 45WN, 46WN)
The test switches are used to test the correct function of each individual warning light. When pressed, the test switches connect 28 V DC to the relevant warning light.

F. Pressure Switch
The pressure switch 71WN is installed between STA1393/FR19 and STA1496/FR20 in the electronic bay. The pressure switch 71WN surveys the residual pressure in the cabin and in the FWD and AFT cargo compartments. An output signal is transmitted by the pressure switch 71WN when there is a differential pressure between the cabin/cargo compartments and the outside which exceeds 0.0025 bar (0.0362 psi).

G. Flashing Unit
Each passenger/crew door, FWD and AFT cargo-compartment door has one flashing unit (red warning light). The red warning light commences to flash when the residual differential pressure exceeds 0.0025 bar (0.0362 psi).
To prevent flashing of the red warning lights, they are deactivated when the escape-slides are activated.

H. Autonomous Stand-By Power Supply Unit (ASPSU)
The ASPSU is installed between STA1393/FR19 and STA1446/FR20 on the RH side of the aircraft in the electronics bay.
If a power failure (of the battery busbar) should occur, an internal monitoring device switches the ASPSU to the RPWS. The ASPSU then supplies 28 V DC to the RPWS for maximum 1 hour under normal temperature conditions.

R **ON A/C 101-104,

A. Emergency Escape-Slide-Release Warning System
Warning circuits are installed in the LH and RH, FWD and AFT passenger/crew doors and emergency exits. Each circuit comprises two limit switches, a flashing warning light and a test switch supplied from the 28 V DC BATT BUS 402PP via circuit breakers 1WN and 2WN.
One limit switch is operated by the door locking mechanism and the second by the emergency escape-slide-release mechanism. The contacts of both switches are connected in series.
Should any attempt be made to unlock a door when the emergency control handle is in the "ARMED" position, the switches will close and 28 V DC will be connected to the warning light of the associated door.
Each circuit is monitored by the flight warning computers of the ECAM system and displayed on the CRT and amber by the MASTER CAUTION pushbutton switches in conjunction with the door warning system.
A test switch is incorporated within each circuit, in parallel with the limit switches, which, when pressed, connects 28 V DC to the warning light to enable individual testing of the circuit.

B. Residual-Pressure Warning System
When there is an existence of residual pressure in the cabin, a warning is visually given at the passenger/crew doors.
The warning is visible inside and outside the aircraft as a flashing red light when:
- the escape-slide is DISARMED,
- engines 1 or 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

When residual pressure exists in the FWD or AFT cargo compartment, a warning appears at the related cargo compartment door.
The warning is visible outside the aircraft as a flashing red light when:
- the access panels 677FR (812CR) are in the open position,
- engines 1 or 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

The ASPSU, which is a rechargeable battery supply, provides 28 V DC power to the RPWS when there is:
- no power available on the battery busbar, and
- residual differential pressure is more than 0.0025 bar (0.0362 psi).

4. Component Description

A. Circuit Breakers (1WN, 2WN)
The circuit breakers (1WN,2WN) are rated at 5A. When closed, they route 28 V DC from BATT BUS 402PP to energize each circuit.

B. Limit Switches (9WN, 10WN, 13WN, 14WN, 25WN, 26WN, 29WN, 30WN, 33WN, 34WN, 37WN, 38WN)
Two limit switches to each door circuit are connected in series.
The limit switches are normally open and close when an attempt is made to unlock or open a door when the emergency control handle is in

"ARMED" position. They route 28 V DC to the warning light and also the to the flight warning computers.

C. Warning Lights (7WN, 8WN, 23WN, 24WN, 31WN, 32WN)
One warning light is located at each monitored door. The warning light flashes when both limit switches in the circuit are closed.

D. Warning Horns (11WN, 12WN, 27WN, 28WN, 35WN, 36WN)
One warning horn is located at each monitored door.

NOTE : ELECTRICAL WIRES ARE NOT CONNECTED TO WARNING HORNS.

E. Test Switches (39WN, 40WN, 43WN, 44WN, 45WN, 46WN)
The test switches are used to test the correct function of each individual warning light. When pressed, the test switches connect 28 V DC to the relevant warning light.

F. Pressure Switch
The pressure switch 71WN is installed between STA1393/FR19 and STA1496/FR20 in the electronic bay. The pressure switch 71WN surveys the residual pressure in the cabin and in the FWD and AFT cargo compartments. An output signal is transmitted by the pressure switch 71WN when there is a differential pressure between the cabin/cargo compartments and the outside which exceeds 0.0025 bar (0.0362 psi).

G. Warning Lights (72WN, 73WN, 74WN, 79WN, 80WN, 82WN)
Each passenger/crew door, FWD and AFT cargo-compartment door has a red warning light with an integrated flashing unit. The red warning light commences to flash when the residual differential pressure exceeds 0.0025 bar (0.0362 psi).
To prevent flashing of the red warning lights, they are deactivated when the escape-slides are activated.

H. Autonomous Stand-By Power Supply Unit (ASPSU)
The ASPSU is installed between STA1393/FR19 and STA1446/FR20 on the RH side of the aircraft in the electronics bay.
If a power failure (of the battery busbar) should occur, an internal monitoring device switches the ASPSU to the RPWS. The ASPSU then supplies 28 V DC to the RPWS for maximum 1 hour under normal temperature conditions.

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,

Post SB 52-2056 For A/C 001-100,

A. Emergency Escape-Slide-Release Warning System

Warning circuits are installed in the LH and RH, FWD and AFT passenger/crew doors and in the emergency exits. Each circuit comprises two limit switches, a flashing warning light, a warning horn and a test switch supplied from the 28 V DC BATT BUS 402PP via circuit breakers 1WN and 2WN.
One limit switch is operated by the door locking mechanism and the second by the emergency escape-slide-release mechanism. The contacts of both switches are connected in series.
Should any attempt be made to unlock a door when the emergency control handle is in the "ARMED" position, the switches will close and 28 V DC will be connected to the warning light and warning horn of the associated door.
Each circuit is monitored by the flight warning computers of the ECAM system and displayed on the CRT and amber by the MASTER CAUTION pushbutton switches in conjunction with the door warning system.
A test switch is incorporated within each circuit, in parallel with the limit switches, which, when pressed, connects 28 V DC to the warning light and warning horn to enable individual testing of the circuit.

B. Residual-Pressure Warning System
When there is an existence of residual pressure in the cabin a warning is visually given at the passenger/crew doors.
The warning is visible inside and outside the aircraft as a flashing red light when:
- the escape-slide is DISARMED,
- engines 1 or 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

When residual pressure exists in the FWD or AFT cargo compartment, a warning appears at the related cargo compartment door.
The warning is visible outside the aircraft as a flashing red light when:

- the access panels 677FR (812CR) are in the open position,
- engines 1 or 2 are off,
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

The ASPSU, which is a rechargeable battery supply, provides 28 V DC power to the RPWS when there is:
- no power available on the battery busbar, and
- residual differential pressure is more than 0.0025 bar (0.0362 psi).

4. Component Description

A. Circuit Breakers (1WN, 2WN)
The circuit breakers (1WN,2WN) are rated at 5A. When closed, they route 28 V DC from BATT BUS 402PP to energize each circuit.

B. Limit Switches (9WN, 10WN, 13WN, 14WN, 25WN, 26WN, 29WN, 30WN, 33WN, 34WN, 37WN, 38WN)
Two limit switches to each door circuit are connected in series.
The limit switches are normally open and close when an attempt is made to unlock or open a door when the emergency control handle is in the "ARMED" position. They route 28 V DC to the warning horn, the warning light and also to the flight warning computers.

C. Warning Lights (7WN, 8WN, 23WN, 24WN, 31WN, 32WN)
One warning light is located at each monitored door. The warning light flashes when both limit switches in the circuit are closed.

D. Warning Horns (11WN, 12WN, 27WN, 28WN, 35WN, 36WN)
One warning horn is located at each monitored door. The warning horn is activated when both limit switches in the circuit are closed.

E. Test Switches (39WN, 40WN, 43WN, 44WN, 45WN, 46WN)
The test switches are used to test the correct function of each individual warning light and warning horn. When pressed, the test switches connect 28 V DC to the relevant warning light and horn.

F. Pressure Switch
The pressure switch 71WN is installed between STA1393/FR19 and STA1496/FR20 in the electronic bay. The pressure switch 71WN surveys the residual pressure in the cabin and in the FWD and AFT cargo compartments. An output signal is transmitted by the pressure switch 71WN when there is a differential pressure between the cabin/cargo compartments and the outside which exceeds 0.0025 bar (0.0362 psi).

G. Warning Lights (72WN, 73WN, 74WN, 79WN, 80WN, 82WN)
Each passenger/crew door, FWD and AFT cargo-compartment door has a red warning light with an integrated flashing unit. The red warning light commences to flash when the residual differential pressure exceeds 0.0025 bar (0.0362 psi).
To prevent flashing of the red warning lights, they are deactivated when the escape-slides are activated.

H. Autonomous Stand-By Power Supply Unit (ASPSU)
The ASPSU is installed between STA1393/FR19 and STA1446/FR20 on the RH side of the aircraft in the electronics bay.
If a power failure (of the battery busbar) should occur, an internal monitoring device switches the ASPSU to the RPWS. The ASPSU then supplies 28 V DC to the RPWS for maximum 1 hour under normal temperature conditions.

R **ON A/C 105-200,

R Post SB 52-2056 For A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R A. Emergency Escape-Slide-Release Warning System
A warning circuit is installed in the LH and RH, FWD, AFT passenger/crew and emergency exit doors.
The circuit has two limit switches, a warning light, a warning horn and a test switch. The circuit is supplied with 28 V DC electrical power:

- from the BATT BUS 402PP through circuit breakers 1WN and 2WN
- from the SVCE BUS 601PP through the circuit breaker 3WN.

One limit switch is operated by the door locking mechanism and the second by the emergency escape-slide-release-mechanism. The contacts of both switches are connected in series.
If a door unlock condition occurs when the emergency escape-slide control-handle is in the "ARMED" position, the switches will close. 28 V DC will then be supplied to the warning light and the warning horn of the related door.
The FWCs of the ECAM system monitors each circuit together with the Door Warning System. The circuit condition is then displayed on the CRTs or an amber (integral light) MASTER CAUTION pushbutton switch.
Each circuit also has a test switch in parallel with the limit switches. When operated (pushed), 28 V DC is supplied to the warning light and the warning horn to give a test function.

R B. Residual-Pressure Warning System
A visual indication is given at the passenger/crew door when the cabin has residual pressure. The visual warning is a red warning light that flashes when these conditions occur:
- the escape-slide is "DISARMED",
R - the engine 1 or 2 is off,
R - the residual differential pressure is more than 0.0025 bar (0.0362 psi).

A visual indication is given at the FWD or AFT cargo compartment doors when the related compartment has residual pressure. The visual warning is a red warning light that flashes when these conditions occur:
- the related access panel 811CR or 812CR is open,
R - the engine 1 or 2 is off,
R - the residual differential pressure is more than 0.0025 bar (0.0362 psi).

The ASPSU is a rechargeable battery supply. It gives an electrical power supply of 28 V DC to the RPWS when these conditions occur:
- no electrical power is available from the BATT BUS 401PP
- no electrical power is available from the SVCE BUS 601PP
- the residual differential pressure is more than 0.0025 bar (0.0362 psi).

4. Component Description

A. Circuit Breakers (1WN, 2WN, 3WN)
When closed, the circuit breakers 1WN, 2WN and 3WN route 28 VDC electrical power to each circuit. 1WN and 2WN route the electrical power from the BATT BUS 402PP, 3WN routes the electrical power from the SVCE BUS 601PP. Circuit breakers 2WN and 3WN are rated at 5 A and 1WN at 7.5 A.

B. Limit Switches (9WN, 10WN, 13WN, 14WN, 25WN, 26WN, 29WN, 30WN, 33WN, 34WN, 37WN, 38WN)
The limit switches are double-pole mechanically actuated switches.

C. Warning Lights (7WN, 8WN, 23WN, 24WN, 31WN, 32WN)
A warning light is installed at the monitored door. The warning lights illuminate when both limit switches (in the related circuit) close.

D. Warning Horns (11WN, 12WN, 27WN, 28WN, 35WN, 36WN)
A Warning horn is installed at each monitored door. The warning horn operates when both limit switches (in the related circuit) close.

NOTE : WARNING HORNS ARE NOT CONNECTED TO THE ELECTRICAL CIRCUIT.

E. Test Switches (39WN, 40WN, 43WN, 44WN, 45WN, 46WN)
The monitored door circuit has a test switch. When operated (pushed), electrical power is supplied to give a test function of the warning light and the warning horn.

F. Pressure Switch (71WN)
The pressure switch is installed in the electronics bay between STA1393/FR19 and STA1496/FR20. The pressure switch detects and
R measures the residual differential pressure in the cabin and in
R the FWD and the AFT cargo compartments. If there is a pressure differential of more than 0.0025 bar (0.0362 psi) (between the cabin/cargo compartments and outside the aircraft), the pressure switch transmits an output signal.

R G. Warning Lights (72WN, 73WN, 74WN, 79WN, 80WN, 82WN)
Each passenger/crew door, FWD and AFT cargo-compartment door has a red warning light with an integrated flashing unit. The warning light flashes when the pressure switch transmits an output signal (when the residual differential pressure is more than 0.0025 bar (0.0362 psi)). The operation of the warning lights stops after activation of the emergency escape-slides.

H. Autonomous Stand-By Power-Supply-Unit (70WN) (ASPSU)
The ASPSU is installed in the right side of the electronics bay between STA1393/FR19 and STA1446/FR20. If electrical power is not available from the related busbars, an internal monitor device (in the ASPSU) connects the ASPSU to the RPWS. The ASPSU then supplies 28 V DC electrical power to the RPWS for a maximum of 1 hour at normal temperatures. The ASPSU also has a heater to help the function of the battery packs at low temperatures.

**ON A/C ALL

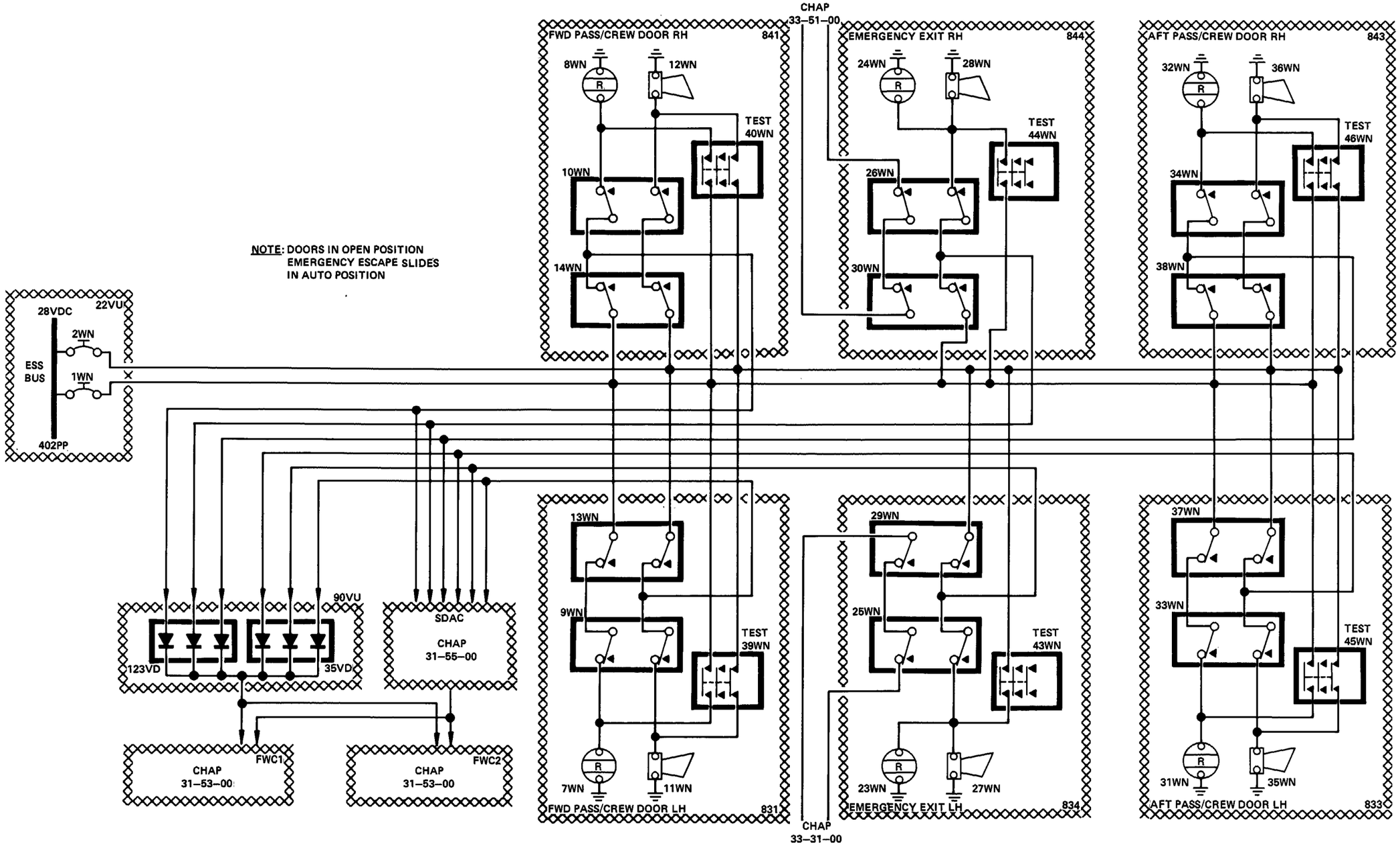
5. Operation

**ON A/C 001-003,

(Ref. Fig. 008)

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,



Electrical Schematic
Figure 008

R EFFECTIVITY: 001-003,

PIA

Printed in France

(Ref. Fig. 009)

R **ON A/C 101-200,

R (Ref. Fig. 010)

R **ON A/C 101-104,

R Post SB 52-2056 For A/C 101-104,

(Ref. Fig. 011)

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,

Post SB 52-2056 For A/C 001-100,

(Ref. Fig. 012)

R **ON A/C 105-200,

R Post SB 52-2056 For A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R (Ref. Fig. 013)

R **ON A/C 101-104,

R Post SB 52-2056 For A/C 101-104,

(Ref. Fig. 011)

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,

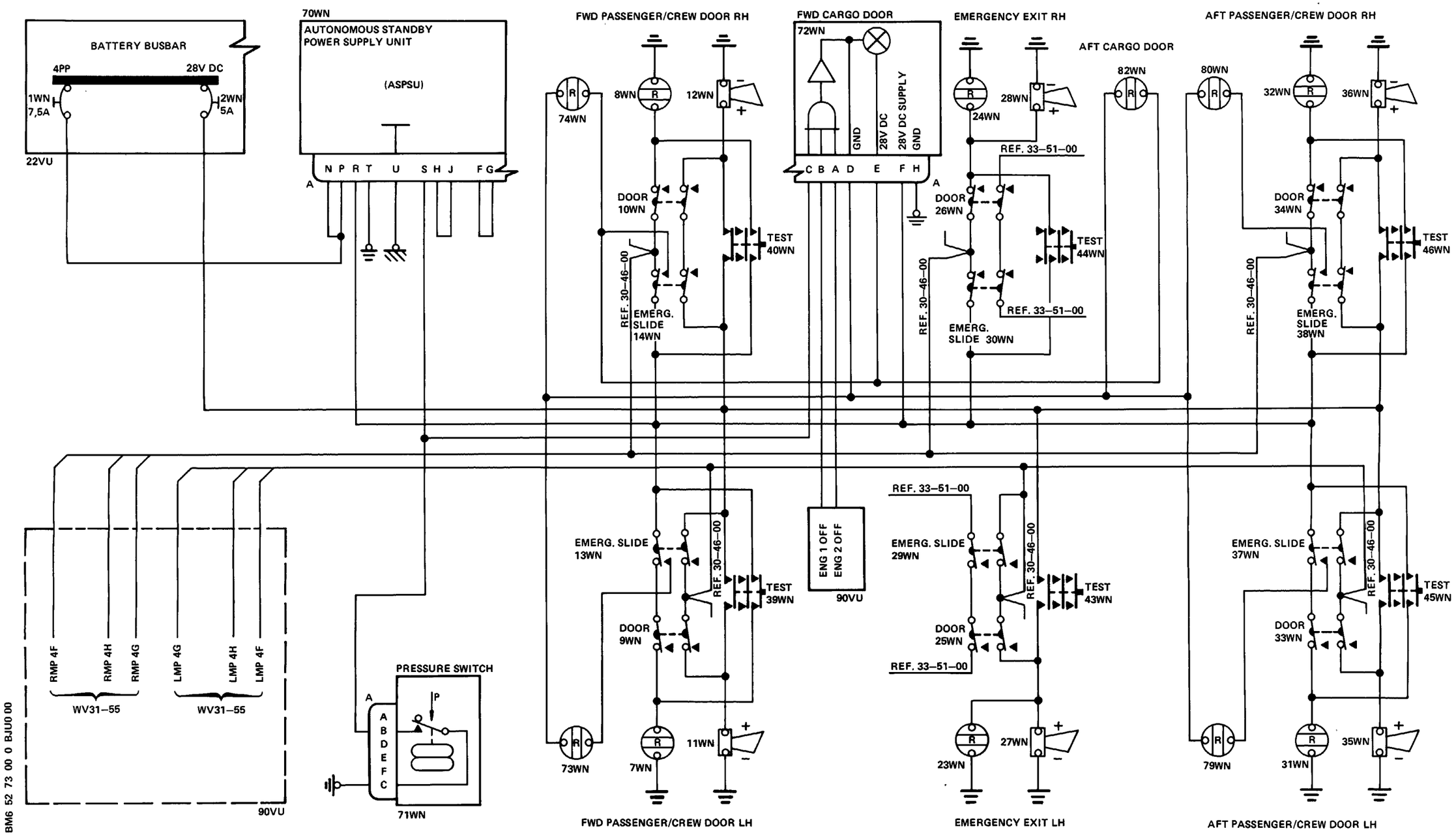
Post SB 52-2056 For A/C 001-100,

(Ref. Fig. 012)

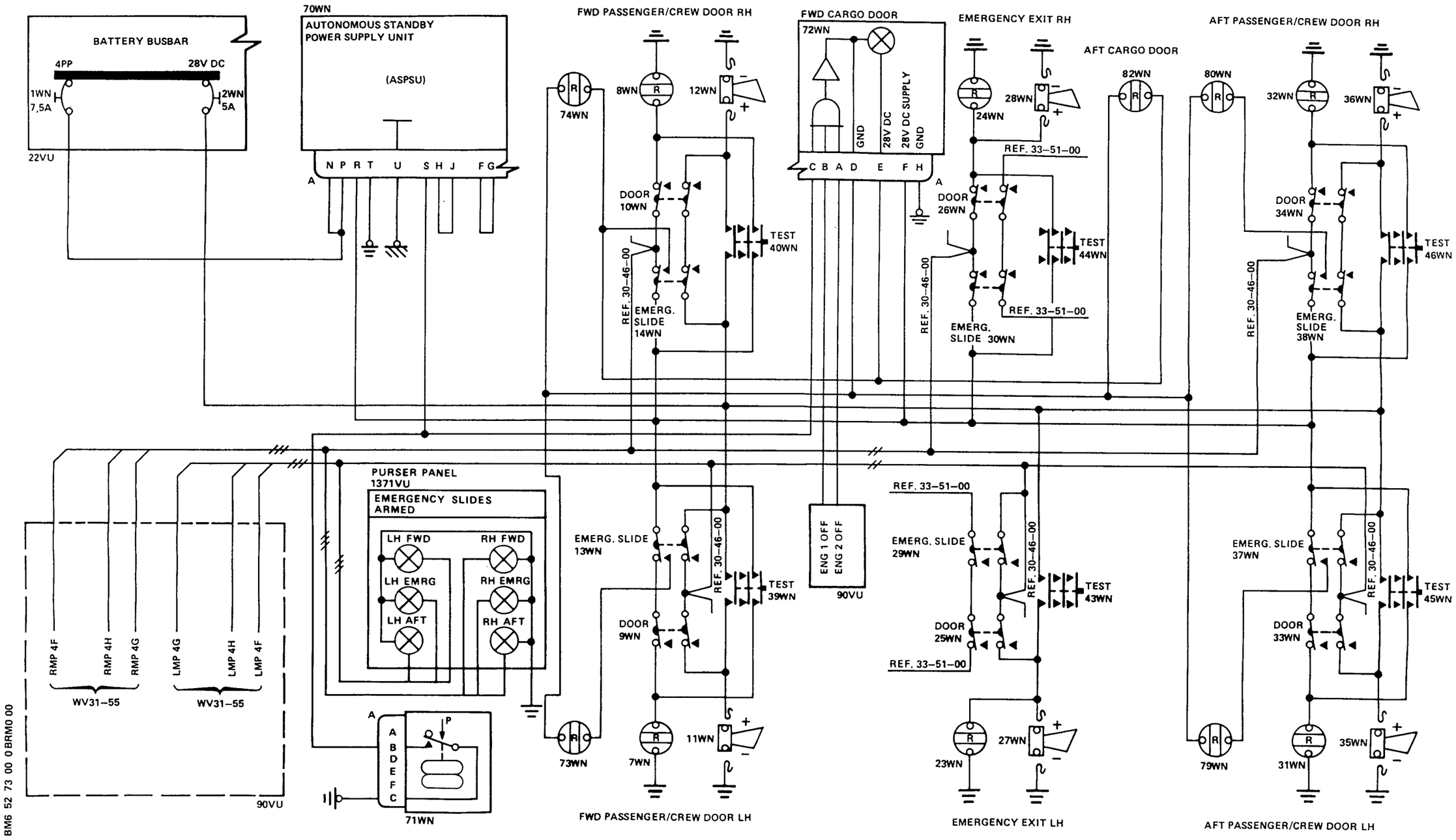
R EFFECTIVITY: 001-200,

PIA

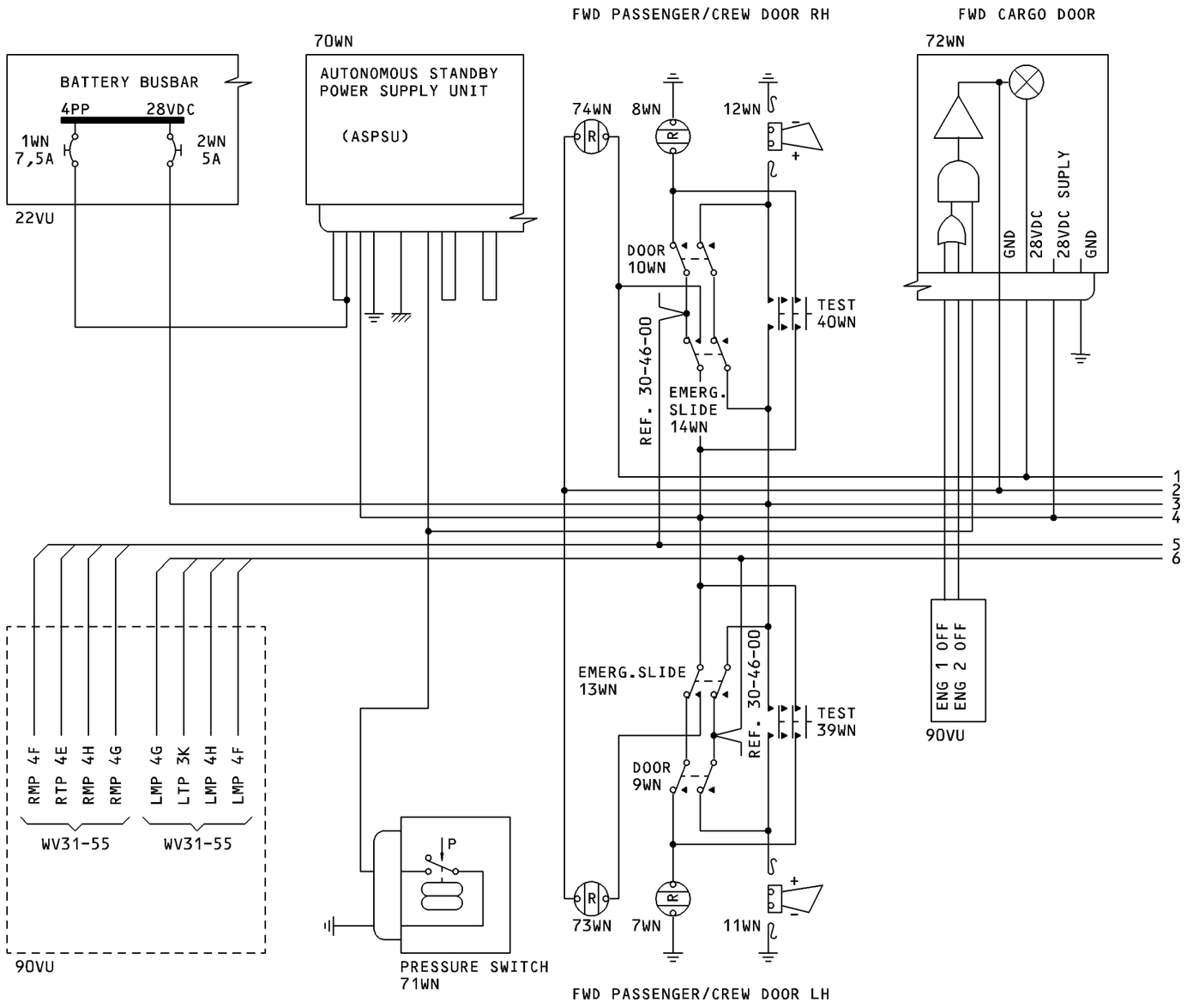
INTENTIONALLY BLANK



Electrical Schematic
Figure 009

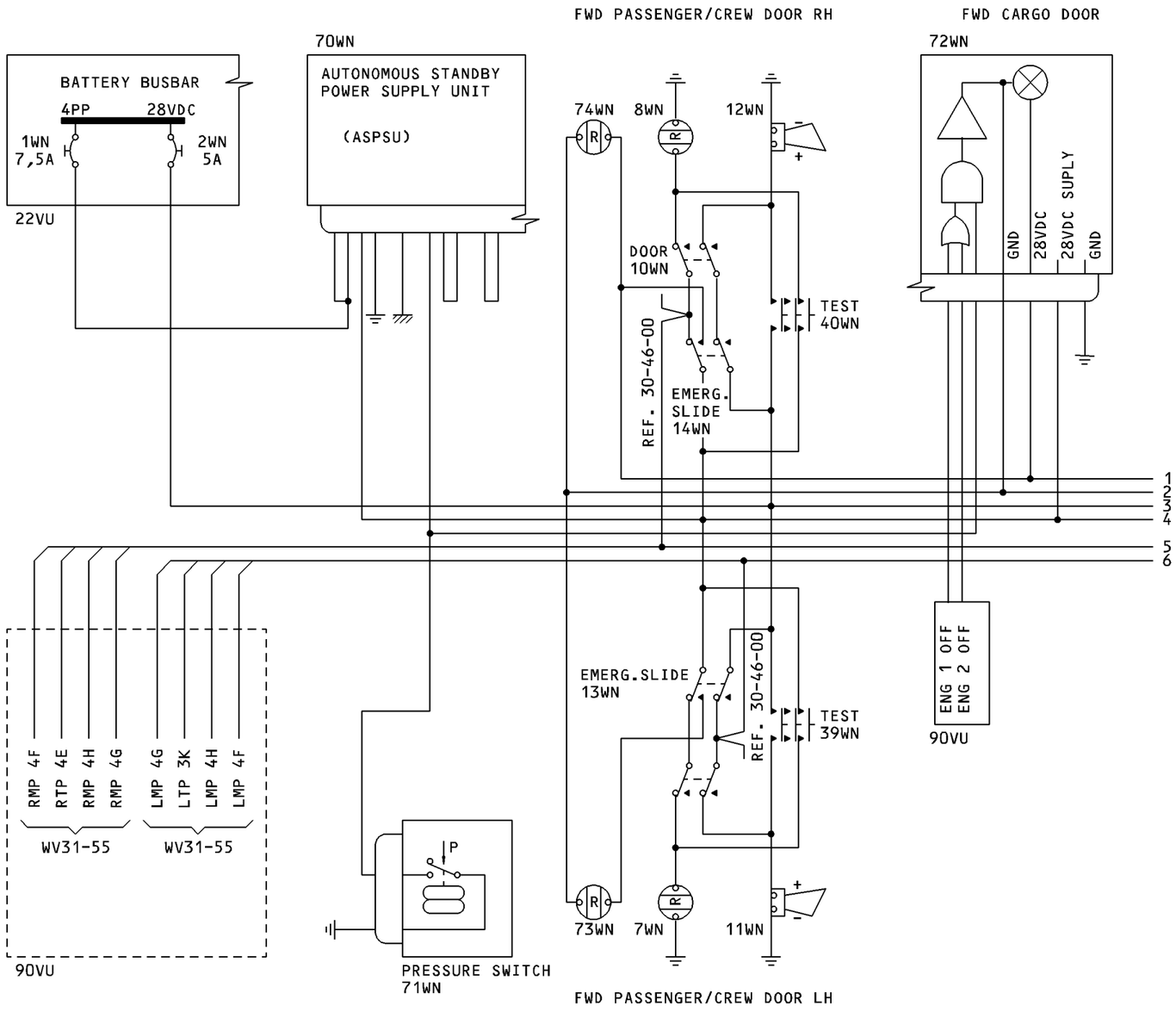


Electrical Schematic
Figure 010



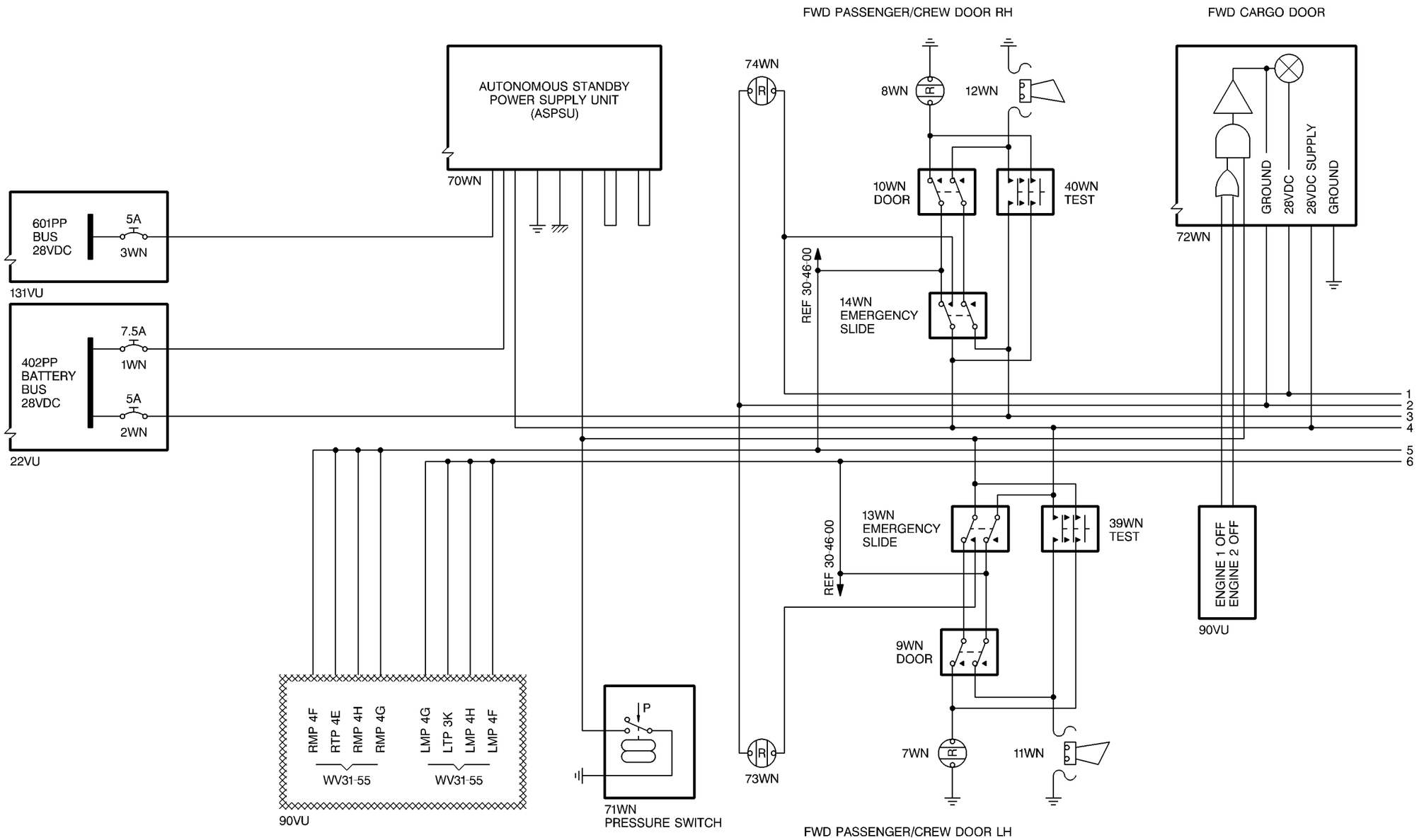
BM6 52 73 00 0 BRMA 00

Electrical Schematic (Sheet 1)
Figure 011



BM6 52 73 00 0 BTMA 00

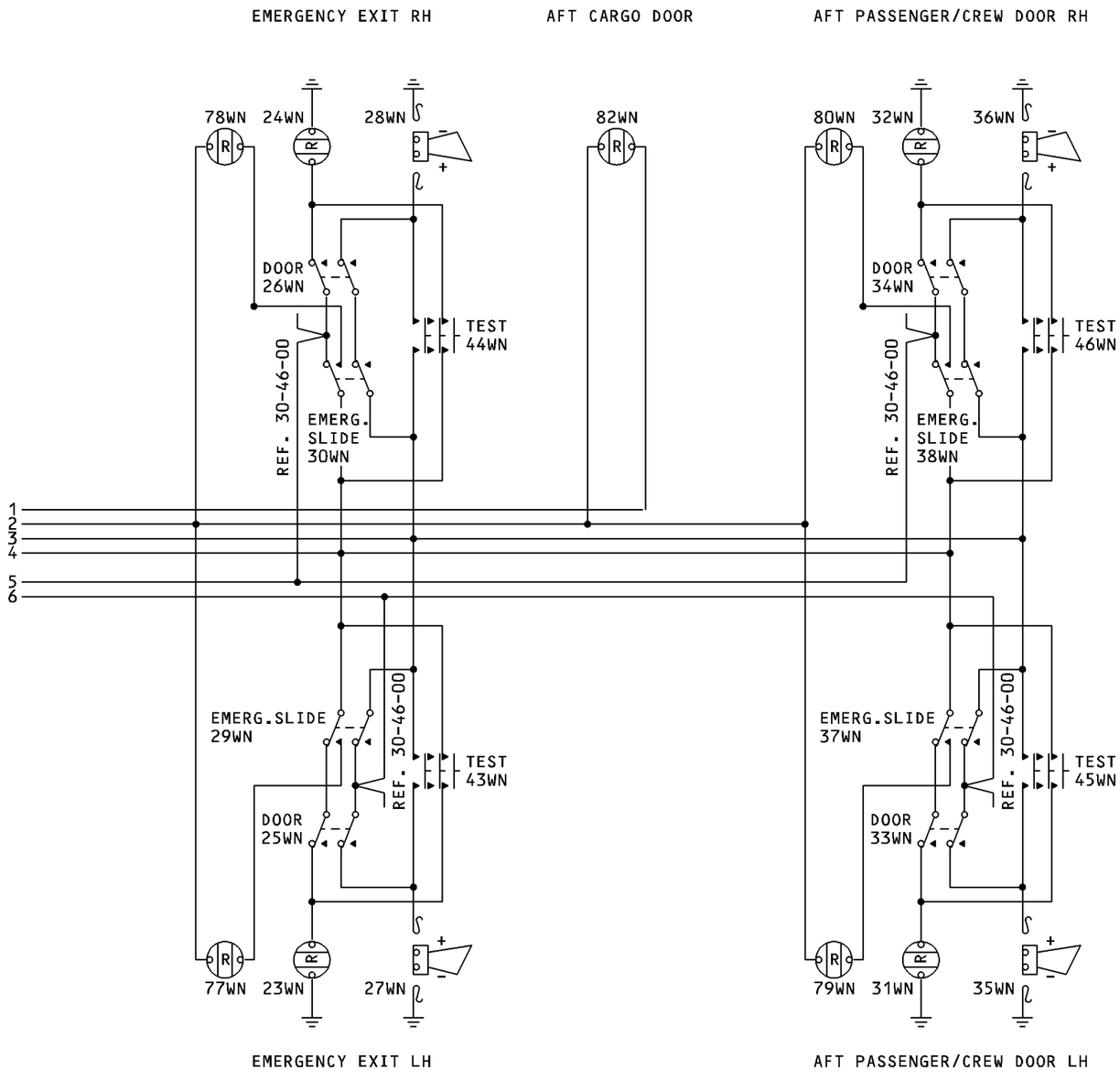
Electrical Schematic (Sheet 1)
Figure 012



BM6 52 73 00 0 BWMA 01

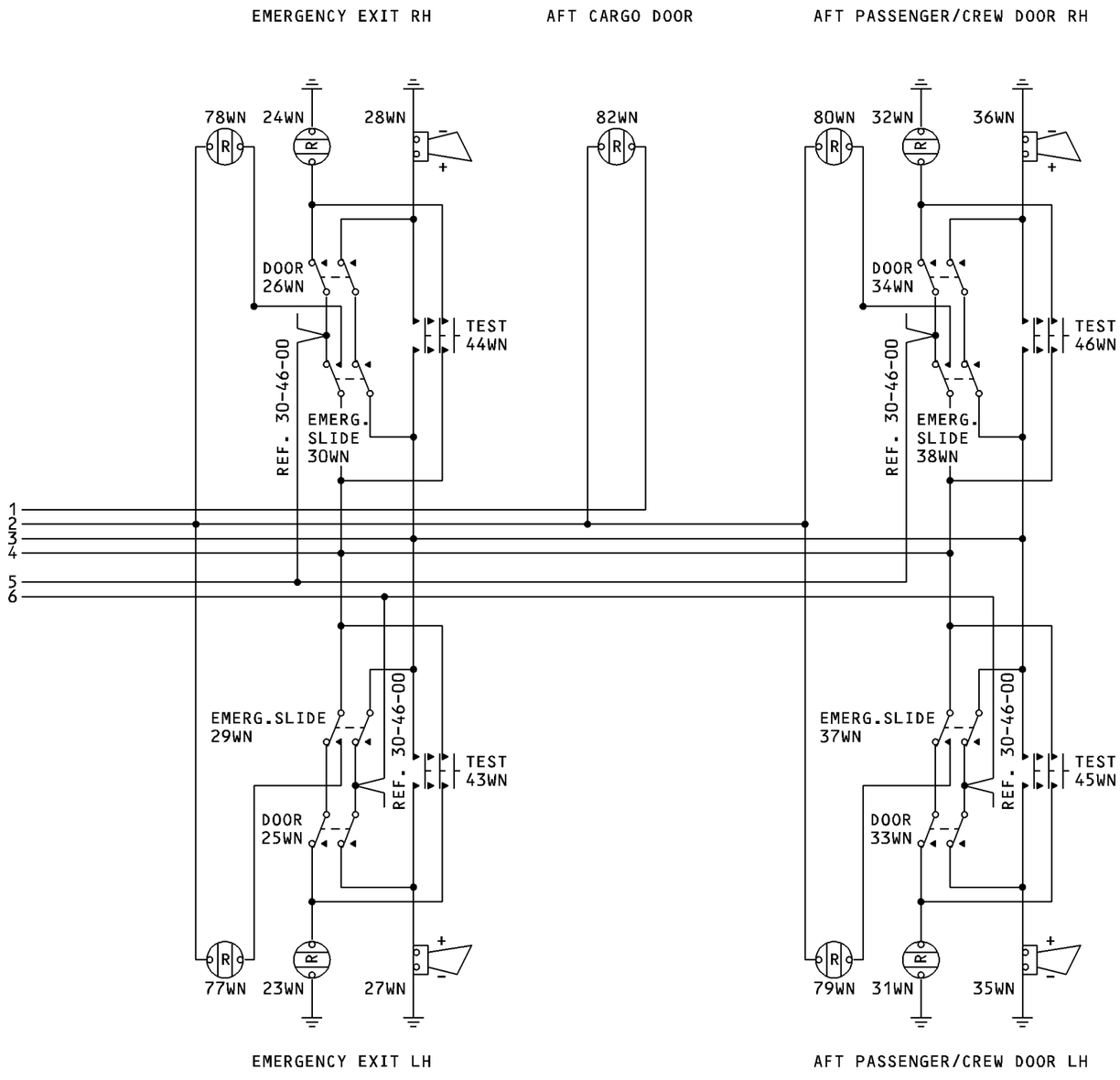
Electrical Schematic (Sheet 1)
Figure 013

R



BM6 52 73 00 0 BRMM 00

Electrical Schematic (Sheet 2)
Figure 011



BM6 52 73 00 0 BTMM 00

Electrical Schematic (Sheet 2)
Figure 012

R **ON A/C 105-200,

R Post SB 52-2056 For A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R (Ref. Fig. 013)

**ON A/C 001-003,

Each of the emergency escape-slide-release warning circuits is supplied from **BATT BUS 402PP** with **28 V DC** via circuit breakers **1WN (ARM ! WARN)** and **2WN (HORN)**. When the doors are closed and locked the emergency escape-slide control handle is set to the **"ARMED"** position. Any attempt to then open the door connects the power source via limit switches to the integral warning light and warning horn.
The system is monitored by the **ECAM** in conjunction with the **Door Warning System**. During automatic flight phase mode the condition of the associated limit switches is monitored by the **FWCs** and displayed on the **CRTs**. The word **"SLIDE"** is displayed in white opposite the relevant monitored door when the emergency escape-slide control handle is in the **"ARMED"** position.

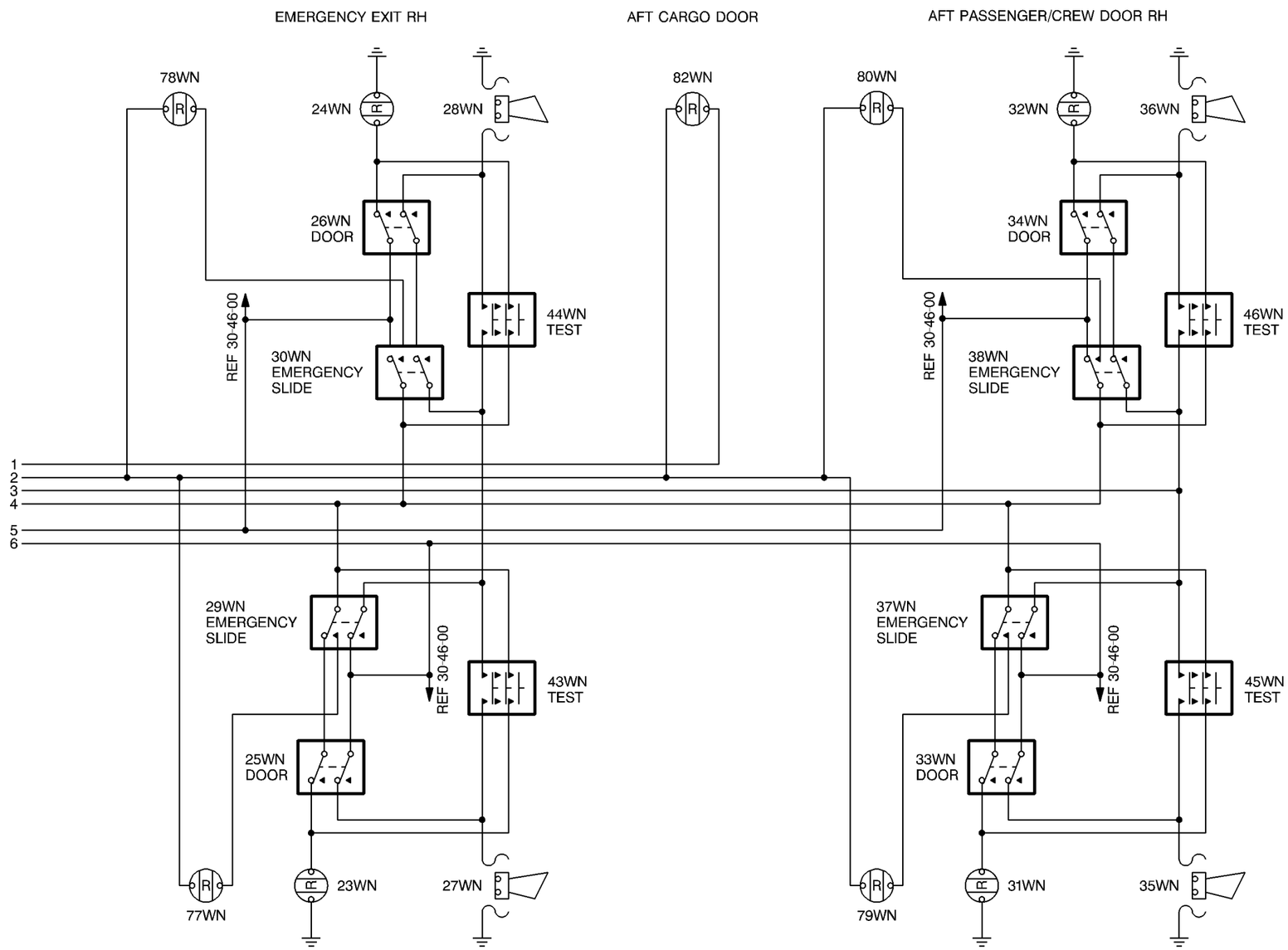
When the escape-slides are armed the word **"SLIDE"** is illuminated amber and the door image is illuminated amber when an attempt is made to open the door. When the door is properly closed and locked the word **"SLIDE"** changed into white and the door image is illuminated green.
Any attempt to open a monitored door when the **Door Warning** display is not being shown on the **CRTs** will result the **MASTER CAUTION** pushbutton switches and the **DOOR** pushbutton switch on the **ECAM** control panel being illuminated amber and a single chime alarm being sounded. Pressing the **DOOR** pushbutton switch on the **ECAM** control panel will cause the **Door Warning** display to be shown on the **CRTs** thus enabling immediate visual location of the relevant door. When the door is again properly closed and locked selection of the **CLEAR** pushbutton switch on **ECAM** control panel will cause the **MASTER CAUTION** pushbutton switches and the **DOOR** pushbutton switch on the **ECAM** control panel to be extinguished and the **CRT** displays to revert to the automatic flight phase mode.

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,

A. Emergency Escape-Slide-Release Warning System
Each of the emergency escape-slide-release warning circuits is supplied from **BATT BUS 402PP** with **28 V DC** via circuit breakers **1WN (ARM ! WARN)** and **2WN (HORN)**. When the doors are closed and locked, the emergency escape

INTENTIONALLY BLANK



BM6 52 73 00 0 BWMM 01

Electrical Schematic (Sheet 2)
Figure 013

R

slide control handle is set to the "ARMED" position. Any attempt to then open the door connects the power source via limit switches to the integral warning light and warning horn.
The system is monitored by the ECAM in conjunction with the Door Warning System. During automatic flight phase mode the condition of the associated limit switches is monitored by the flight warning computers and displayed on the CRT displays. The word "SLIDE" is displayed in white opposite the relevant monitored door when the emergency escape-slide control handle is in the "ARMED" position.

When the escape-slides are armed, the word "SLIDE" is illuminated amber and the door image is illuminated amber when an attempt is made to open the door. When the door is properly closed and locked, the word "SLIDE" is changed into white and the door image is illuminated green.
Any attempt to open a monitored door when the Door Warning display is not shown on the CRT displays will result in the MASTER CAUTION pushbutton switches and the DOOR pushbutton switch on the ECAM control panel being illuminated amber and a single chime alarm being sounded. Pressing the DOOR pushbutton switch on the ECAM control panel will cause the Door Warning display to be shown on the CRT displays thus enabling immediate visual location of the relevant door. When the door is again properly closed and locked, selecting the CLEAR pushbutton switch on ECAM control panel will cause the MASTER CAUTION pushbutton switches and the DOOR pushbutton switch on the ECAM control panel to be extinguished and the CRT displays to revert to the automatic flight phase mode.

B. Residual-Pressure Warning System (RPWS)
Residual pressure in the cabin and in the FWD and AFT cargo compartments is monitored by the RPWS. The residual cabin pressure is measured by a pressure switch in the electronic bay. The pressure switch contains a membrane which activates the switch at a differential pressure of 0.0025 bar (0.0362 psi). When the pressure switch is activated, it causes the red warning lights to flash on and off, when the two engines are off and the escape-slides are disarmed.
One red warning light is installed in each passenger/crew door, FWD and AFT cargo-compartment door. When the warning lights are activated, the flashing red light in each passenger/crew door is visible inside and outside the aircraft through the related windows. The flashing red lights in the cargo compartment doors are only visible from the outside of the aircraft when the access panels 677FR (812CR) are open.

C. Autonomous Standby Power Supply Unit (ASPSU)
The ASPSU consists of two integral battery packs, each of which has five cells and is capable of a power output of 28 V DC. When the aircraft voltage decreases or is not available, the ASPSU automatically switches to the two integral batteries. To ensure that maximum power is available at all times, a battery charging device is installed in the ASPSU. The charging device is supplied from the aircraft 28 V DC power supply.
The batteries are capable of supplying 28 V DC for maximum 1 hour when no recharging is available. A heating device connected to the battery

packs assures that the batteries function correctly in low temperature conditions.

R **ON A/C 101-200,

R A. Emergency Escape-Slide-Release Warning System
R Each of the emergency escape-slide-release warning circuits is supplied
R from BATT BUS 402PP with 28 V DC via circuit breakers 1WN (ARM ! WARN) and
R 2WN (HORN). When the doors are closed and locked, the emergency escape
R slide control handle is set to the "ARMED" position. Any attempt to then
R open the door connects the power source via limit switches to the integral
R warning light.
R The system is monitored by the ECAM in conjunction with the Door Warning
R System. During automatic flight phase mode, the condition of the associated
R limit switches is monitored by the flight warning computers and displayed
R on the CRT displays. The word "SLIDE" is displayed in white opposite the
R relevant monitored door when the emergency escape-slide control handle is
R in the "ARMED" position.

R When the escape-slides are armed, the word "SLIDE" is illuminated amber and
R the door image is illuminated amber when an attempt is made to open the
R door. When the door is properly closed and locked, the word "SLIDE"
R is changed into white and the door image is illuminated green.
R Any attempt to open a monitored door when the Door Warning display is not
R shown on the CRT displays will result in the MASTER CAUTION pushbutton
R switches and the DOOR pushbutton switch on the ECAM control panel being
R illuminated amber and a single chime alarm being sounded. Pressing the
R DOOR pushbutton switch on the ECAM control panel will cause the Door
R Warning display to be shown on the CRT displays thus enabling immediate
R visual location of the relevant door. When the door is again properly
R closed and locked, selecting the CLEAR pushbutton switch on ECAM control
R panel will cause the MASTER CAUTION pushbutton switches and the DOOR
R pushbutton switch on the ECAM control panel to be extinguished and the
R CRT displays to revert to the automatic flight phase mode.

R B. Residual-Pressure Warning System (RPWS)
R Residual pressure in the cabin and in the FWD and AFT cargo compartments
R is monitored by the RPWS. The residual cabin pressure is measured by a
R pressure switch in the electronic bay. The pressure switch contains a
R membrane which activates the switch at a differential pressure of
R 0.0025 bar (0.0362 psi). When the pressure switch is activated, it
R causes the red warning lights to flash on and off, when the two
R engines are off and the escape-slides are disarmed.
R One red warning light is installed in each passenger/crew door, FWD and
R AFT cargo-compartment door. When the warning lights are activated, the
R flashing red light in each passenger/crew door is visible inside and
R outside the aircraft through the related windows. The flashing red
R lights in the cargo compartment doors are only visible from the outside
R of the aircraft when the access panels 677FR (812CR) are open.

R C. Autonomous Standby Power Supply Unit (ASPSU)
R The ASPSU consists of two integral battery packs, each of which has
R five cells and is capable of a power output of 28 V DC. When the aircraft
R voltage decreases or is not available, the ASPSU automatically
R switches to the two integral batteries. To ensure that maximum power is
R available at all times, a battery charging device is installed in the
R ASPSU. The charging device is supplied from the aircraft 28 V DC power
R supply.
R The batteries are capable of supplying 28 V DC for maximum 1 hour when
R no recharging is available. A heating device connected to the battery
R packs assures that the batteries function correctly in low temperature
R conditions.

**ON A/C 001-100,

Post SB 52-2039 For A/C 001-003,

Post SB 52-2056 For A/C 001-100,

A. Emergency Escape-Slide-Release Warning System
Each of the emergency escape-slide-release warning circuits is supplied from BATT BUS 402PP with 28 V DC via circuit breakers 1WN (ARM ! WARN) and 2WN (HORN). When the doors are closed and locked, the emergency escape slide control handle is set to the "ARMED" position. Any attempt to then open the door connects the power source via limit switches to the integral warning light and warning horn.
The system is monitored by the ECAM in conjunction with the Door Warning System. During automatic flight phase mode the condition of the associated limit switches is monitored by the flight warning computers and displayed on the CRT displays. The word "SLIDE" is displayed in white opposite the relevant monitored door when the emergency escape-slide control handle is in the "ARMED" position.

When the escape-slides are armed, the word "SLIDE" is illuminated amber and the door image is illuminated amber when an attempt is made to open the door. When the door is properly closed and locked, the word "SLIDE" is changed into white and the door image is illuminated green.
Any attempt to open a monitored door when the Door Warning display is not shown on the CRT displays will result in the MASTER CAUTION pushbutton switches and the DOOR pushbutton switch on the ECAM control panel being illuminated amber and a single chime alarm being sounded. Pressing the DOOR pushbutton switch on the ECAM control panel will cause the Door Warning display to be shown on the CRT displays thus enabling immediate visual location of the relevant door. When the door is again properly closed and locked, selecting the CLEAR pushbutton switch on ECAM control panel will cause the MASTER CAUTION pushbutton switches and the DOOR pushbutton switch on the ECAM control panel to be extinguished and the CRT displays to revert to the automatic flight phase mode.

B. Residual-Pressure Warning System (RPWS)
Residual pressure in the cabin and in the FWD and AFT cargo compartments is monitored by the RPWS. The residual cabin pressure is measured by a pressure switch in the electronic bay. The pressure switch contains a membrane which activates the switch at a differential pressure of 0.0025 bar (0.0362 psi). When the pressure switch is activated, it causes the red warning lights to flash on and off, when one or both engines are off and the escape-slides are disarmed.
One red warning light is installed in each passenger/crew door, FWD and AFT cargo-compartment door. When the warning lights are activated, the flashing red light in each passenger/crew door is visible inside and outside the aircraft through the related windows. The flashing red lights in the cargo compartment doors are only visible from the outside of the aircraft when the access panels 677FR (812CR) are open.

C. Autonomous Standby Power Supply Unit (ASPSU)
The ASPSU consists of two integral battery packs, each of which has five cells and is capable of a power output of 28 V DC. When the aircraft voltage decreases or is not available, the ASPSU automatically switches to the two integral batteries. To ensure that maximum power is available at all times, a battery charging device is installed in the ASPSU. The charging device is supplied from the aircraft 28 V DC power supply.
The batteries are capable of supplying 28 V DC for maximum 1 hour when no recharging is available. A heating device connected to the battery packs assures that the batteries function correctly in low temperature conditions.

R **ON A/C 101-104,

R Post SB 52-2056 For A/C 101-104,

A. Emergency Escape-Slide-Release Warning System
Each of the emergency escape-slide-release warning circuits is supplied from BATT BUS 402PP with 28 V DC via circuit breakers 1WN (ARM ! WARN) and 2WN (HORN). When the doors are closed and locked, the emergency escape slide control handle is set to the "ARMED" position. Any attempt to then open the door connects the power source via limit switches to the integral warning light.
The system is monitored by the ECAM in conjunction with the Door Warning System. During automatic flight phase mode, the condition of the associated limit switches is monitored by the flight warning computers and displayed on the CRT displays. The word "SLIDE" is displayed in white opposite the relevant monitored door when the emergency escape-slide control handle is in the "ARMED" position.

When the escape-slides are armed, the word "SLIDE" is illuminated amber and the door image is illuminated amber when an attempt is made to open the door. When the door is properly closed and locked, the word "SLIDE"

is changed into white and the door image is illuminated green.
Any attempt to open a monitored door when the Door Warning display is not shown on the CRT displays will result in the MASTER CAUTION pushbutton switches and the DOOR pushbutton switch on the ECAM control panel being illuminated amber and a single chime alarm being sounded. Pressing the DOOR pushbutton switch on the ECAM control panel will cause the Door Warning display to be shown on the CRT displays thus enabling immediate visual location of the relevant door. When the door is again properly closed and locked, selecting the CLEAR pushbutton switch on ECAM control panel will cause the MASTER CAUTION pushbutton switches and the DOOR pushbutton switch on the ECAM control panel to be extinguished and the CRT displays to revert to the automatic flight phase mode.

B. Residual-Pressure Warning System (RPWS)
Residual pressure in the cabin and in the FWD and AFT cargo compartments is monitored by the RPWS. The residual cabin pressure is measured by a pressure switch in the electronic bay. The pressure switch contains a membrane which activates the switch at a differential pressure of 0.0025 bar (0.0362 psi). When the pressure switch is activated, it causes the red warning lights to flash on and off, when one or both engines are off and the escape-slides are disarmed.
One red warning light is installed in each passenger/crew door, FWD and AFT cargo-compartment door. When the warning lights are activated, the flashing red light in each passenger/crew door ist visible inside and outside the aircraft through the related windows. The flashing red lights in the cargo compartment doors are only visible from the outside of the aircraft when the access panels 677FR (812CR) are open.

C. Autonomous Standby Power Supply Unit (ASPSU)
The ASPSU consists of two integral battery packs, each of which has five cells and is capable of a power output of 28 V DC. When the aircraft voltage decreases or is not available, the ASPSU automatically switches to the two integral batteries. To ensure that maximum power is available at all times, a battery charging device is installed in the ASPSU. The charging device is supplied from the aircraft 28 V DC power supply.
The batteries are capable of supplying 28 V DC for maximum 1 hour when no recharging is available. A heating device connected to the battery packs assures that the batteries function correctly in low temperature conditions.

R **ON A/C 105-200,

R Post SB 52-2056 For A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R A. Emergency Escape-Slide-Release Warning System

R Each of the emergency escape-slide-release warning circuits is supplied
R with 28 V DC via circuit breakers 1WN (ARM ! WARN), 2WN (HORN) and 3WN.
R The circuit breakers 1WN and 2WN are supplied from the BATT BUS 402PP and
R the circuit breaker 3WN is supplied from the SVCE BUS 601PP (ASPSU SUPPLY).
R When the doors are closed and locked, the emergency escape-slide control
R handle is set to the "ARMED" position. Any attempt to then open the door
R connects the power source via limit switches to the integral warning
R light.
R The system is monitored by the ECAM in conjunction with the Door Warning
R System. During automatic flight phase mode, the condition of the associated
R limit switches is monitored by the flight warning computers and displayed
R on the CRT displays. The word "SLIDE" is displayed in white opposite the
R relevant monitored door when the emergency escape-slide control handle is
R in the "ARMED" position.

R When the escape-slides are armed, the word "SLIDE" is illuminated amber and
R the door image is illuminated amber when an attempt is made to open the
R door. When the door is properly closed and locked, the word "SLIDE"
R is changed into white and the door image is illuminated green.
R Any attempt to open a monitored door when the Door Warning display is not
R shown on the CRT displays will result in the MASTER CAUTION pushbutton
R switches and the DOOR pushbutton switch on the ECAM control panel being
R illuminated amber and a single chime alarm being sounded. Pressing the
R DOOR pushbutton switch on the ECAM control panel will cause the Door
R Warning display to be shown on the CRT displays thus enabling immediate
R visual location of the relevant door. When the door is again properly
R closed and locked, selecting the CLEAR pushbutton switch on ECAM control
R panel will cause the MASTER CAUTION pushbutton switches and the DOOR
R pushbutton switch on the ECAM control panel to be extinguished and the
R CRT displays to revert to the automatic flight phase mode.

R B. Residual-Pressure Warning System (RPWS)
R Residual pressure in the cabin and in the FWD and AFT cargo compartments
R is monitored by the RPWS. The residual cabin pressure is measured by a
R pressure switch in the electronic bay. The pressure switch contains a
R membrane which activates the switch at a differential pressure of
R 0.0025 bar (0.0362 psi). When the pressure switch is activated, it
R causes the red warning lights to flash on and off, when one or both
R engines are off and the escape-slides are disarmed.
R One red warning light is installed in each passenger/crew door, FWD and
R AFT cargo-compartment door. When the warning lights are activated, the
R flashing red light in each passenger/crew door ist visible inside and
R outside the aircraft through the related windows. The flashing red
R lights in the cargo compartment doors are only visible from the outside
R of the aircraft when the access panels 811CR (677FR) are open.

R C. Autonomous Standby Power Supply Unit (ASPSU)
R The ASPSU consists of two integral battery packs, each of which has
R five cells and is capable of a power output of 28 V DC. When the aircraft
R voltage decreases or is not available, the ASPSU automatically
R switches to the two integral batteries. To ensure that maximum power is

R available at all times, a battery charging device is installed in the
R ASPSU. The charging device is supplied from the aircraft 28 V DC power
R supply.
R The batteries are capable of supplying 28 V DC for maximum 1 hour when
R no recharging is available. A heating device connected to the battery
R packs assures that the batteries function correctly in low temperature
R conditions.

**ON A/C ALL

6. Interfaces

Signal directions

FROM	TO	CHAP.REF
Limit switch	SDAC	31-55-00
Limit switch	FWC	31-53-00
Emergency evacuation	Relay	25-63-00

EMERGENCY ESCAPE SLIDE RELEASE WARNING - ADJUSTMENT/TEST

WARNING: SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

R **ON A/C ALL

R Post SB 52-2039 For A/C 001-003,

EMERGENCY ESCAPE SLIDE RELEASE AND RESIDUAL PRESSURE WARNING ADJUSTMENT/TEST

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

**ON A/C ALL

1. Operational Test

A. Reason for the Job
Test of emergency escape slide release warning associated with the following doors:
- FWD Passenger/Crew Doors
- AFT Passenger/Crew Doors
- Emergency Exits

B. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 5.2 m (17 ft.)
B. 98A52108003001	Safety Pin Set - Emergency Control Handle

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-61-20, P. Block 1	Passenger Compartment Escape Facilities
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
22VU	EMER LT/EXIT LT	20WL	205/E27
22VU	EMER LT/EXIT LT	21WL	205/E28
132VU	LIGHTING/EMER LT/EXIT LT CHARGER	24WL	324/L75

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R (d)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
22VU	EMER LT/EXIT LT	20WL	205/E27
22VU	EMER LT/EXIT LT	21WL	205/E28
132VU	LIGHTING/EMER LT/EXIT LT CHARGER	24WL	324/L75
131VU	ASPSU SUPPLY	3WN	316/C54

R **ON A/C ALL

(2)Test

WARNING : BEFORE TESTING MAKE CERTAIN THAT FWD AND AFT PASSENGER/CREW DOORS AND PASSENGER COMPARTMENT EMERGENCY EXITS ARE CLOSED.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

NOTE : When lowering FWD or AFT passenger/crew doors, make sure that linkage guide rollers are properly located in sliders.

(Ref. Fig. 501)
(Ref. Fig. 502)

**ON A/C 001-100,

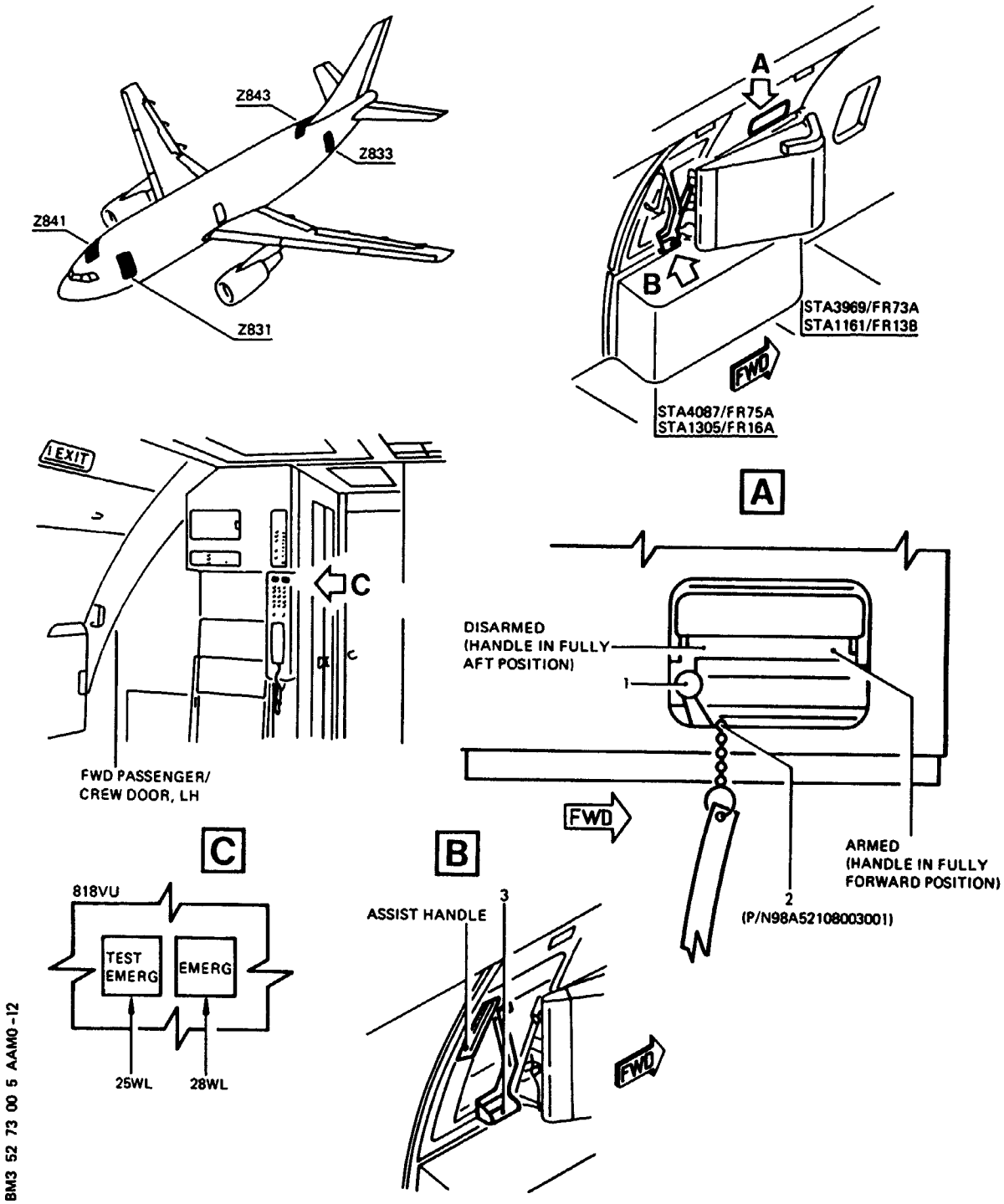
(a)Test of Emergency Escape Slide Release Warning (Ref. Fig. 501)

ACTION	RESULT
1. On FWD and AFT passenger/crew doors make certain that the emergency and slide operation cylinders are safetied	
2. Remove safety pin (2) PN 98A52108003001 and set emergency control handle (1)	

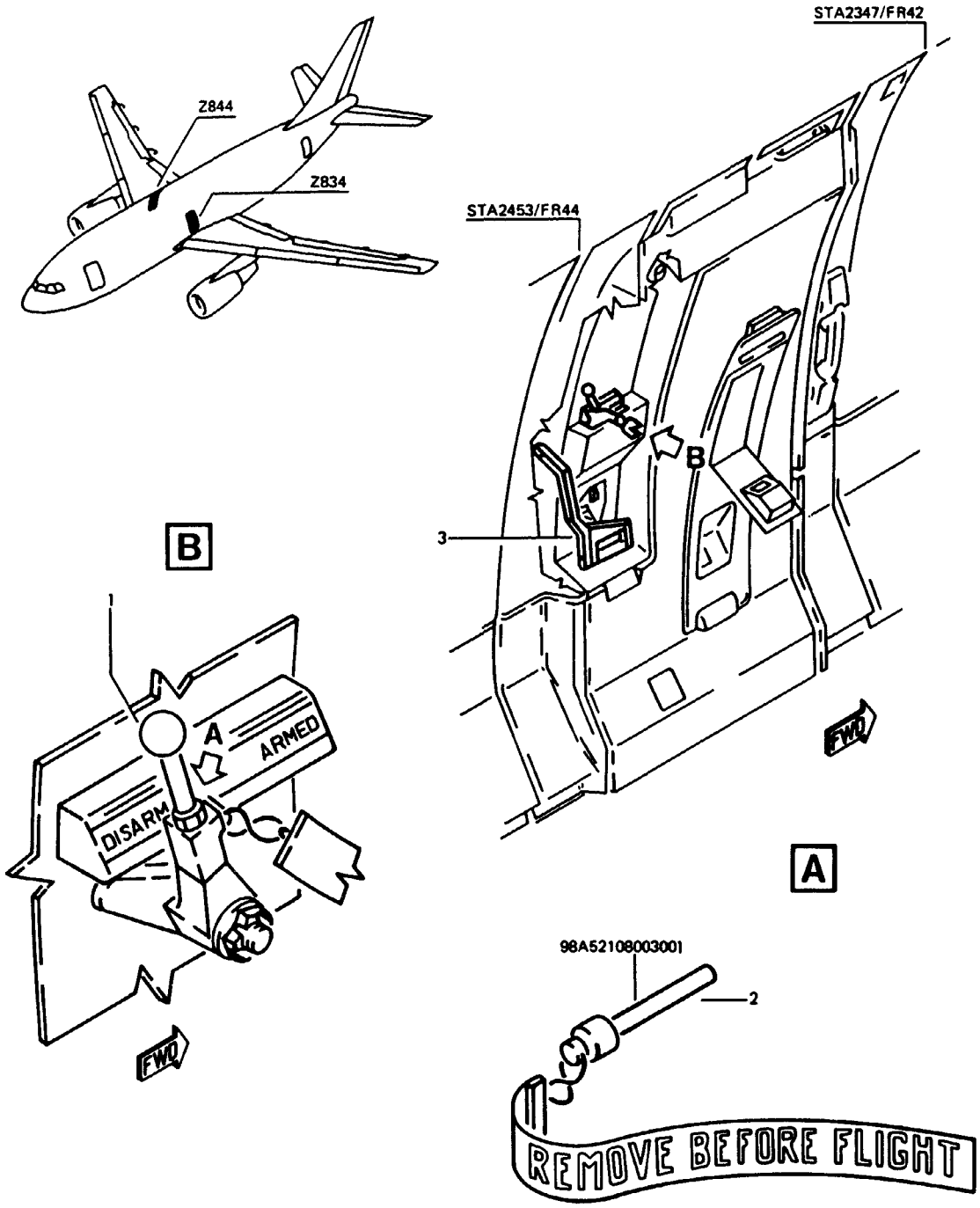
ACTION	RESULT
to "ARMED"	
WARNING : DO NOT OPEN DOOR.	
3. Unlock interior control handle (3)	Warning light comes on and warning horn sounds
4. Lock interior control handle (3), set emergency control handle (1) to "DISARMED" and insert safety pin (2) PN 98A52108003001	Warning light and warning horn go off
5. Arm emergency and slide operation cylinders	

(b)Test of Emergency Exit Lights On Emergency Exits (Ref. Fig. 502)

ACTION	RESULT
1. On panel 818VU - Press EMER P/BSW 28WL	Emergency lights come on and integral light in P/BSW comes on
2. On passenger compartment emergency exit - Remove safety pin (2) PN 98A52108003001 and set emergency control handle (1) to "ARMED"	
WARNING : DO NOT OPEN EXIT.	
3. Unlock interior handle (3) and at forward frame lining, lift rubber seal between lower and upper frame lining	Warning light comes on and warning horn sounds Behind rubber seal of door frame lining: - Check that emergency exit overwing lights are on
4. Lock interior control handle (3), set emergency control handle (1) to "DISARMED" and insert safety pin (2) PN 98A52108003001	Warning light, warning horn and emergency exit overwing lights go off
5. On panel 818VU - Press EMER P/BSW 28WL	Emergency lights go off and integral light in P/BSW goes off



Safety Pin and Panel 818VU
Figure 501



Passenger Compartment Emergency Exit - Safety Pin
Figure 502

**ON A/C 101-200,

(a)Test of Emergency Escape Slide Release Warning (Ref. Fig. 501)

ACTION	RESULT
1. On FWD and AFT passenger/crew doors make certain that the emergency and slide operation cylinders are safetied	
2. Remove safety pin (2) PN 98A52108003001 and set emergency control handle (1) to "ARMED"	
WARNING : DO NOT OPEN DOOR.	
3. Unlock interior control handle (3)	Warning light comes on
4. Lock interior control handle (3), set emergency control handle (1) to "DISARMED" and insert safety pin (2) PN 98A52108003001	Warning light goes off
5. Arm emergency and slide operation cylinders	

(b)Test of Emergency Exit Lights on Emergency Exits (Ref. Fig. 502)

ACTION	RESULT
1. On panel 818VU - Press EMER P/BSW 28WL	Emergency lights come on and integral light in P/BSW comes on
2. On passenger compartment emergency exit - Remove safety pin (2) PN 98A52108003001 and set emergency control handle (1) to "ARMED"	
WARNING : DO NOT OPEN PASSENGER COMPARTMENT EMERGENCY EXIT.	
3. Unlock interior handle (3) and at forward frame lining, lift rubber seal between lower and upper frame lining	Warning light comes on Behind rubber seal of door frame lining: - Check that emergency exit overwing lights are on

ACTION	RESULT
4. Lock interior control handle (3), set emergency control handle (1) to "DISARMED" and insert safety pin (2) PN 98A52108003001	Warning light and emergency exit overwing lights go off
5. On panel 818VU - Press EMER P/BSW 28WL	Emergency lights go off and integral light in P/BSW goes off

**ON A/C ALL

(3)Close-Up
(a)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(b)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(c)Remove access platform.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

2. Functional Test of Residual Pressure Warning System

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

A. Reason for the Job

Test of residual pressure warning system associated with following doors:
- FWD passenger/crew doors
- AFT passenger/crew doors
- FWD and AFT cargo compartment doors

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

B. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 5.2 m (17 ft.)
B. 98A52108003001	Safety Pin Set - Emergency Control Handle
C. 98D52703000000	Connector - Shunt
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 25-61-20, P. Block 1	Passenger Compartment Escape Facilities
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-30-00, P. Block 1	Cargo Compartment Doors

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

Post SB 52-2056 For A/C ALL

B. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 5.2 m (17 ft.)
B. 98A52108003001	Safety Pin Set - Emergency Control Handle
C. 98D52703000000	Connector - Shunt
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 25-61-20, P. Block 1	Passenger Compartment Escape Facilities
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 79-33-00, P. Block 1	Oil Pressure Indicating and Low Oil Pressure Warning

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)On panel 429VU, make sure that ENG START selector switch is in OFF position.
(c)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(d)Make certain that electronics racks ventilation is correct.
(e)Open access panel 811CR on FWD cargo compartment door and 677FR on AFT cargo compartment door.
(f)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

(g)Make sure that all passenger/crew doors, emergency exits and AFT cargo compartment doors are closed.
(h)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(i)Open access door 131AZ.
(j)Disconnect electrical connector 71WN-A from cabin pressure detection switch 71WN.
(k)Connect the shunt connector PN 98D52703000000 71WN to electrical connector 71WN-A.
(l)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R C. Procedure
R (1)Job Set-Up
R (a)Position access platform.
R (b)On panel 429VU, make sure that ENG START selector switch is in OFF position.
R (c)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (d)Make certain that electronics racks ventilation is correct.
R (e)Open access panel 811CR on FWD cargo compartment door and 812CR on AFT cargo compartment door.
R (f)Make certain that the following circuit breakers are closed:

R PANEL	SERVICE	IDENT.	LOCATION
R 22VU	SLIDES/ARM & WARN	1WN	205/E23
R 22VU	SLIDES/HORN	2WN	205/E22
R 131VU	ASPSU SUPPLY	3WN	316/C54

R (g)Make sure that all passenger/crew doors, emergency exits and AFT cargo compartment doors are closed.
R (h)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
R (i)Open access door 131AZ.
R (j)Disconnect electrical connector 71WN-A from cabin pressure detection switch 71WN.
R (k)Connect the shunt connector PN 98D52703000000 71WN to electrical connector 71WN-A.
R (l)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(2)Test of the Residual Pressure Warning System

ACTION	RESULT
1. Make certain that emergency and slide operation cylinders on all passenger/crew doors are safetied (Ref. 52-10-00, P. Block 301 and 25-61-20, P. Block 1).	
2. On LH FWD passenger/crew door - Remove safety pin (2) PN 98A52108003001 and set emergency control handle (1) to "ARMED".	On LH FWD passenger/crew door - Residual pressure warning light is off.
3. On LH FWD passenger/crew door	On LH FWD passenger/crew door

ACTION	RESULT
- Set emergency control handle (1) to "DISARMED" and insert safety pin (2) PN 98A52108003000.	- Residual pressure warning light comes on.
4. Proceed with test steps 1. thru 3. for all passenger/crew doors.	
5. On FWD and AFT cargo compartment doors - Look at residual pressure warning lights.	On FWD and AFT cargo compartment doors - The residual pressure warning lights are on.
6. Open the FWD cargo compartment door.	
7. Remove the shunt connector PN 98D52703000000 from the electrical connector 71WN-A and connect electrical connector to cabin pressure detection switch 71WN.	
8. On all passenger/crew doors and cargo compartment doors - Look at residual pressure warning lights.	On all passenger/crew doors and cargo compartment doors - The residual pressure warning lights are off.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

Post SB 52-2056 For A/C ALL

(2)Test of the Residual Pressure Warning System

ACTION	RESULT
1. Disconnect electrical connector S297 from low oil pressure switch of engine 1 (Ref. 79-33-00, P. Block 1).	
2. Make certain that emergency and slide operation cylinders on all passenger/crew doors are safetied (Ref. 52-10-00, P. Block 301 and 25-61-20, P. Block 1).	
3. On LH FWD passenger/crew door - Remove safety pin (2)	On LH FWD passenger/crew door - Residual pressure warning light

ACTION	RESULT
PN 98A52108003001 and set emergency control handle (1) to "ARMED".	is off.
4. On LH FWD passenger/crew door - Set emergency control handle (1) to "DISARMED" and insert safety pin (2) PN 98A52108003000.	On LH FWD passenger/crew door - Residual pressure warning light comes on.
5. Proceed with test steps 2. thru 4. for all passenger/crew doors.	
6. On FWD and AFT cargo compartment doors - Look at residual pressure warning lights.	On FWD and AFT cargo compartment doors - The residual pressure warning lights are on.
7. Disconnect electrical connector S297 from low oil pressure switch of engine 2 (Ref. 79-33-00, P. Block 1).	On passenger/crew doors - The residual pressure warning light goes off. On FWD and AFT cargo compartment doors - The residual pressure warning light goes off.
8. Connect electrical connector S297 to low oil pressure switch of engine 1 (Ref. 79-33-00, P. Block 1).	On passenger/crew doors - The residual pressure warning light comes on. On FWD and AFT cargo compartment doors - The residual pressure warning light comes on.
9. Connect electrical connector S297 to low oil pressure switch of engine 2 (Ref. 79-33-00, P. Block 1).	On all passenger/crew doors and cargo doors - The residual pressure warning light stays on.
10. Open the FWD cargo compartment door.	
11. Remove the shunt connector PN 98D52703000000 from the electrical connector 71WN-A and connect electrical connector to cabin pressure detection switch 71WN.	
12. On all passenger/crew doors and cargo compartment doors - Look at residual pressure	On all passenger/crew doors and cargo compartment doors - The residual pressure warning

ACTION	RESULT
warning lights.	lights are off.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(3)Close-Up
(a)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(b)Close access door 131AZ.
(c)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(d)Close access panels 811CR and 677FR.
(e)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(f)Remove access platform.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

3. Operational Test of Residual Cabin Pressure Warning System (with Functional Test of the Associated Pressure Switch)

WARNING : STOP THE OPENING PROCEDURE IF THE RED WARNING LIGHT FLASHES. RESIDUAL PRESSURE COULD CAUSE THE DOOR TO OPEN WITH A SUDDEN FORCE AND INJURE PERSONS AND/OR DAMAGE THE AIRCRAFT.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

A. Reason for the Job
Test of residual pressure warning system associated with following doors:
- FWD passenger/crew doors
- AFT passenger/crew doors
- FWD and AFT cargo compartment doors

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

B. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 5.2 m (17 ft.)
B. 98A52108003001	Safety Pin Set - Emergency Control Handle
C.	Pitot Static Tester

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 25-61-20, P. Block 1	Passenger Compartment Escape Facilities
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-30-00, P. Block 1	Cargo Compartment Doors

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)On panel 429VU, make sure that ENG START selector switch is in OFF position.
(c)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(d)Make certain that electronics racks ventilation is correct.
(e)Open access panel 811CR on FWD cargo compartment door and 677FR on AFT cargo compartment door.
(f)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

(g)Make sure that all passenger/crew doors, emergency exits and AFT cargo compartment doors are closed.
(h)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(i)Open access door 131AZ.
(j)In the avionics compartment, remove the blanking plug from the pressure switch.
(k)Connect the pitot static tester to the pressure switch and set the pitot static tester to ambient pressure.
(l)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R C. Procedure
R (1)Job Set-Up
R (a)Position access platform.
R (b)On panel 429VU, make sure that ENG START selector switch is in OFF position.
R (c)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (d)Make certain that electronics racks ventilation is correct.
R (e)Open access panel 811CR on FWD cargo compartment door and 812CR on AFT cargo compartment door.
R (f)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
131VU	ASPSU SUPPLY	3WN	316/C54

R (g)Make sure that all passenger/crew doors, emergency exits and AFT cargo compartment doors are closed.
R (h)Open FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
R (i)Open access door 131AZ.
R (j)In the avionics compartment, remove the blanking plug from the pressure switch.
R (k)Connect the pitot static tester to the pressure switch and set the pitot static tester to ambient pressure.
R (l)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(2)Operational Test of the Residual Pressure Warning System

ACTION	RESULT
1. On all passenger/crew doors: - Make certain that the emergency control handle (1) is in the "DISARMED" position and safetied with the safety pin.	
2. On the pitot static tester: - Slowly increase the pressure.	When the pressure is between 0.002 bar (0.0290psi) and 0.003 bar (0.0435 psi) more than ambient, the following red CABIN PRESSURE warning lights starts flashing: - 73WN (FWD left passenger/crew door) - 74WN (FWD right passenger/crew door) - 79WN (AFT left passenger/crew

ACTION	RESULT
	door) - 80WN (AFT right passenger/crew door) - 72WN (FWD cargo door) - 82WN (AFT cargo door)
3. On circuit breaker panel 22VU: - open circuit breaker 1WN, location 205/E23.	On the related doors: - the red CABIN PRESSURE warning lights continue flashing.
4. On circuit breaker panel 22VU: - close circuit breaker 1WN, location 205/E23.	On the related doors: - the red CABIN PRESSURE warning lights continue flashing.
5. On the pitot static tester: - increase the pressure to 0.0035 bar (0.0507 psi) more than ambient pressure, then slowly decrease the pressure.	When the pressure is between 0.003 bar (0.0435 psi) and 0.002 bar (0.0290 psi) more than ambient, the red CABIN PRESSURE warning lights go off.

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

(2)Operational Test of the Residual Pressure Warning System

ACTION	RESULT
1. On all passenger/crew doors: - Make certain that the emergency control handle (1) is in the "DISARMED" position and safetied with the safety pin.	
2. On the pitot static tester: - Slowly increase the pressure.	When the pressure is between 0.002 bar (0.0290psi) and 0.003 bar (0.0435 psi) more than ambient, the following red CABIN PRESSURE warning lights starts flashing: - 73WN (FWD left passenger/crew door) - 74WN (FWD right passenger/crew door) - 79WN (AFT left passenger/crew door) - 80WN (AFT right passenger/crew door) - 72WN (FWD cargo door) - 82WN (AFT cargo door)

ACTION	RESULT
R 3. On circuit breaker panels 22VU and 131VU: R - open circuit breakers 1WN and 31WN. R - close circuit breaker 1WN. R - close circuit breaker 3WN.	On the related doors: - the red **CABIN PRESSURE** warning lights continue flashing. - the red **CABIN PRESSURE** warning lights come on. - the red **CABIN PRESSURE** warning lights go off.
5. On the pitot static tester: - increase the pressure to 0.0035 bar (0.0507 psi) more than ambient pressure, then slowly decrease the pressure.	When the pressure is between 0.003 bar (0.0435 psi) and 0.002 bar (0.0290 psi) more than ambient, the red **CABIN PRESSURE** warning lights go off.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(3)Close-Up
(a)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(b)Disconnect the pitot static tester from the pressure switch.
(c)Install the blanking plug to the pressure switch.
(d)Close access door 131AZ.
(e)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(f)Close access panels 811CR and 677FR.
(g)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(h)Remove access platform.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

4. Capacity Test of Autonomous Standby Power Supply Unit (ASPSU) with the Aircraft Systems

A. Reason for the Job
To make certain that the capacity of the ASPSU is correct.

NOTE : The following procedure describes the capacity test of the ASPSU with aircraft systems. To make sure that the ASPSU operates correctly, you can alternatively perform the procedure given in Para. 5.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.6 m (8.63 ft.)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors

C. Procedure

(1)Job Set-Up

(a)Position access platform.

(b)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(c)Make certain that electronics racks ventilation is correct.

(d)Open the FWD cargo compartment door (Ref. 52-30-00, P. Block 1).

(e)Open access door 131AZ.

(f)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R 4. Capacity Test of Autonomous Standby Power Supply Unit (ASPSU) with the
R Aircraft Systems

R A. Reason for the Job

R To make certain that the capacity of the ASPSU is correct.

R NOTE : The following procedure describes the capacity test of the ASPSU
R with aircraft systems. To make sure that the ASPSU operates
R correctly, you can alternatively perform the procedure given
R in Para. 5.

R B. Equipment and Materials

R ITEM	DESIGNATION
R (1)	Access Platform, 2.6 m (8.63 ft.)

R Referenced Procedures

R - 24-41-00, P. Block 301	AC External Power Control
R - 52-30-00, P. Block 1	Cargo Compartment Doors

R C. Procedure
R (1)Job Set-Up
R (a)Position access platform.
R (b)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (c)Make certain that electronics racks ventilation is correct.
R (d)Open the FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
R (e)Open access door 131AZ.
R (f)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
131VU	ASPSU SUPPLY	3WN	316/C54

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(2)Battery Capacity Test from the Built-In Test Panel

NOTE : Make certain that the ambient temperature of the electronic compartment is below 35°C (95°F).

ACTION	RESULT
1. On the ASPSU: - push the TEST pushbutton.	On the ASPSU: - the following OK and FAULT LEDs come on: . UNIT . 28V DC . OUTPUT . BATT 1 . BATT 2 - after approx. 10 s: . the FAULT LEDs go off. . the OK LEDs stay on. - after approx. 1 minute (when the test is automatically ended): . the OK LEDs go off.
2. On the ASPSU: - push the TEST pushbutton together with the MAINT CYCLE pushbutton.	On the ASPSU: - the following OK and FAULT LEDs come on: . BATT 1. . BATT 2. - after approx. 3 hours: . the FAULT LEDs go off.

ACTION	RESULT
	. the OK LEDs stay on.
3. On the ASPSU: - push the TEST pushbutton together with the MAINT CYCLE pushbutton.	On the ASPSU: - the OK LEDs go off.

(a)If the test fails and the FAULT LEDs stay on and the OK LED goes off, do the following steps:
1 Disconnect the electrical connector (7OWN-A) from the ASPSU.
2 Remove the batteries.
3 Install fully charged batteries.
4 Connect the electrical connector (7OWN-A).

(3)Close-Up
(a)Close access door 131AZ.
(b)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1)
(c)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(d)Remove access platform.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

5. Capacity Test of the Autonomous Standby Power Supply Unit (ASPSU) by Replacing the Batteries

A. Reason for the Job
To make certain that the capacity of the ASPSU is correct after battery replacement.

B. Referenced Procedures
- 52-73-18, P. Block 401 Power Supply Unit-Autonomous Standby (7OWN)

C. Procedure
(1)Replace the batteries of the ASPSU (Ref. 52-73-18, P. Block 401).

NOTE : Make sure that you install fully charged batteries.

(2)Do the Bite Test of the ASPSU as described in Para. 6. to make certain that the ASPSU is serviceable.

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

6. Bite Test of Autonomous Standby Power Supply Unit (ASPSU)

A. Reason for the Job
To make certain that the ASPSU is serviceable.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.6 m (8.63 ft.)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors

C. Procedure
(1)Job Set-Up
(a)Position access platform.
(b)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open the FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(e)Open access door 131AZ.
(f)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

**ON A/C 105-200,

Post SB 52-2068 For A/C 105-200,

6. Bite Test of Autonomous Standby Power Supply Unit (ASPSU)

A. Reason for the Job
To make certain that the ASPSU is serviceable.

B. Equipment and Materials

ITEM	DESIGNATION
(1)	Access Platform, 2.6 m (8.63 ft.)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors

C. Procedure

(1)Job Set-Up
(a)Position access platform.
(b)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(c)Make certain that electronics racks ventilation is correct.
(d)Open the FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(e)Open access door 131AZ.
(f)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
131VU	ASPSU SUPPLY	3WN	316/C54

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(2)Bite Test of the ASPSU

ACTION	RESULT
1. On the ASPSU: - push the TEST pushbutton.	On the ASPSU: - the following OK and FAULT LEDs come on: . UNIT . 28V DC . OUTPUT . BATT 1 . BATT 2 - after approx. 10 s: . the FAULT LEDs go off. . the OK LEDs stay on. - after approx. 1 minute (when the test is automatically ended): . the OK LEDs go off.

(3)Close-Up
(a)Close access door 131AZ.
(b)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(c)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(d)Remove access platform.

WARNING LIGHT - REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Insertion/Extraction Tool
B.	Circuit Breaker Safety Clips and Tags
C. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-13, P. Block 401	Lining and Insulation

2. Procedure

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM/WARN	1WN	E23
22VU	SLIDES/HORN	2WN	E22
133VU	ASPSU SUPPLY	3WN	316/C54

(2)Remove door lining (Ref. 52-10-13, P. Block 401 and (Ref. 52-23-13, P. Block 401).

B. Removal (Ref. Fig.)

(1)Use insertion/extraction tool and disconnect connectors (1) from warning light (2).

(2)Withdraw warning light (2) from door panel.

C. Installation (Ref. Fig.)

(1)Depress springs and install warning light (2) into door panel.

(2)Use insertion/extraction tool and connect connectors (1) to warning light (2).

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R 1. Equipment and Materials

R ITEM	DESIGNATION
R A.	Insertion/Extraction Tool
R B.	Circuit Breaker Safety Clips and Tags

ITEM	DESIGNATION
C. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-13, P. Block 401	Lining and Insulation

2. Procedure

A. Job Set-Up

(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM/WARN	1WN	E23
22VU	SLIDES/HORN	2WN	E22
133VU	ASPSU SUPPLY	3WN	316/C54

(2)Remove door lining (Ref. 52-10-13, P. Block 401 and (Ref. 52-23-13, P. Block 401).

B. Removal (Ref. Fig.)

(1)Use insertion/extraction tool and disconnect connectors (1) from warning light (2).

(2)Withdraw warning light (2) from door panel.

C. Installation (Ref. Fig.)

(1)Depress springs and install warning light (2) into door panel.

(2)Use insertion/extraction tool and connect connectors (1) to warning light (2).

**ON A/C ALL

D. Test

(1)Remove safety clips and tags and close circuit breakers: 1WN and 2WN.

(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).

(3)Make certain that electronics racks ventilation is correct.

ACTION	RESULT
1. Test switch adjacent to warning light - Press in	Warning light - Flashes

R **ON A/C 105-200,

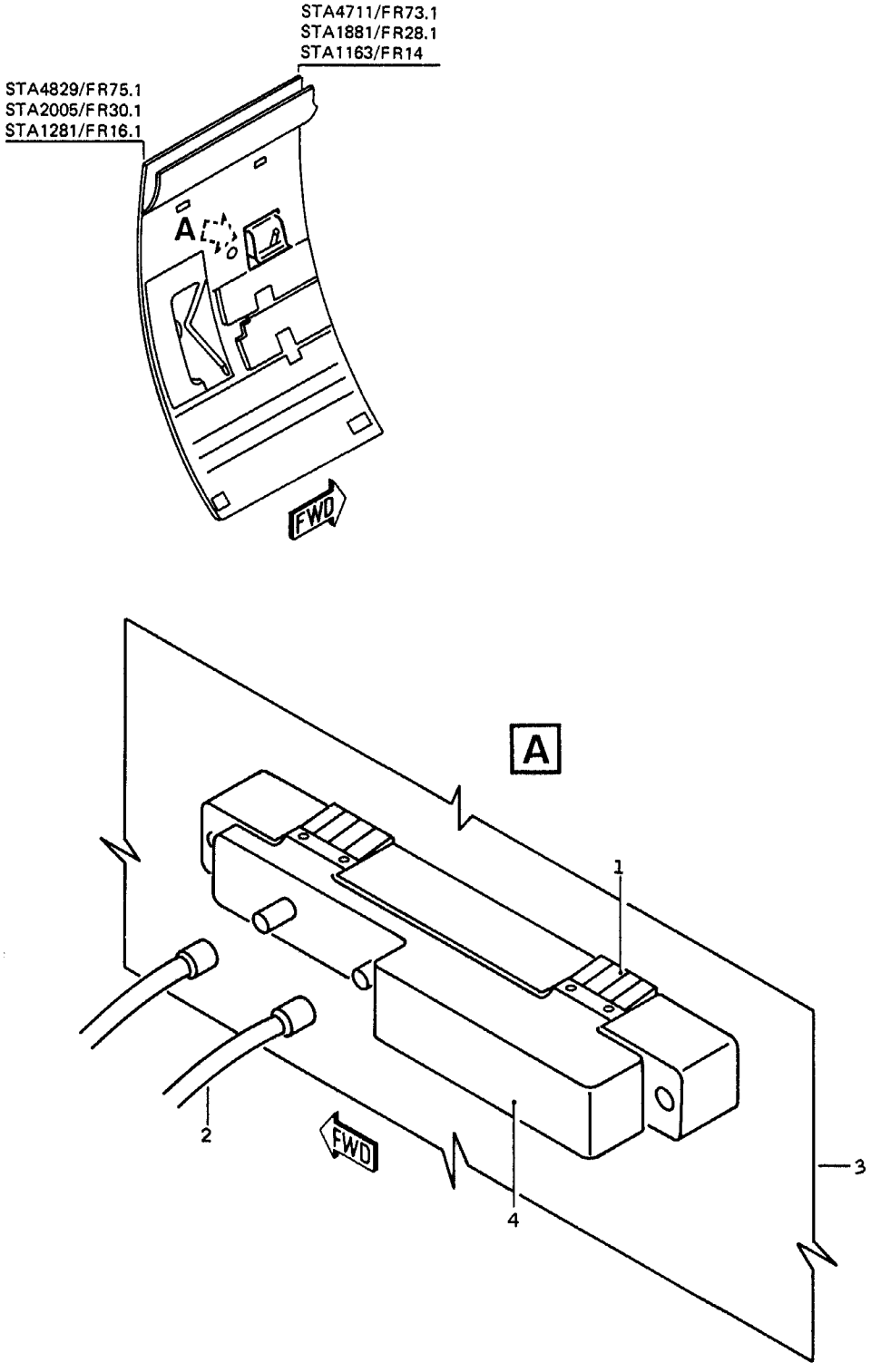
R Post SB 52-2068 For A/C 105-200,

R D. Test
R (1)Remove safety clips and tags and close circuit breakers: 1WN, 2WN and 3WN.
R (2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
R (3)Make certain that electronics racks ventilation is correct.

ACTION	RESULT
1. Test switch adjacent to warning light	
- Press in	Warning light - Flashes

R **ON A/C ALL

E. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)On all Passenger/Crew Doors and Emergency Exits, spray all components which have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(3)Install door lining (Ref. 52-10-13, P. Block 401 and Ref. 52-23-13, P. Block 401).
(4)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).



Passenger/Crew Door Warning Light
Figure 401

WARNING HORN - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 5.2 m (17 ft.)
B.	Circuit Breaker Safety Clips and Tags
C. Material No. 08-007	Bonding and Adhesive Compounds (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-13, P. Block 401	Lining and Insulation

2. Procedure

R **ON A/C 001-100,

(Ref. Fig. 401)

R **ON A/C 101-200,

(Ref. Fig. 402)

R **ON A/C ALL

A. Job Set-Up

(1)Position access platform, and open relevant door.

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).

(2)Safety emergency escape slide, emergency operation cylinder and warning system (Ref. 52-10-00, P. Block 301).

(3)Open, safety and tag the following circuit breakers:

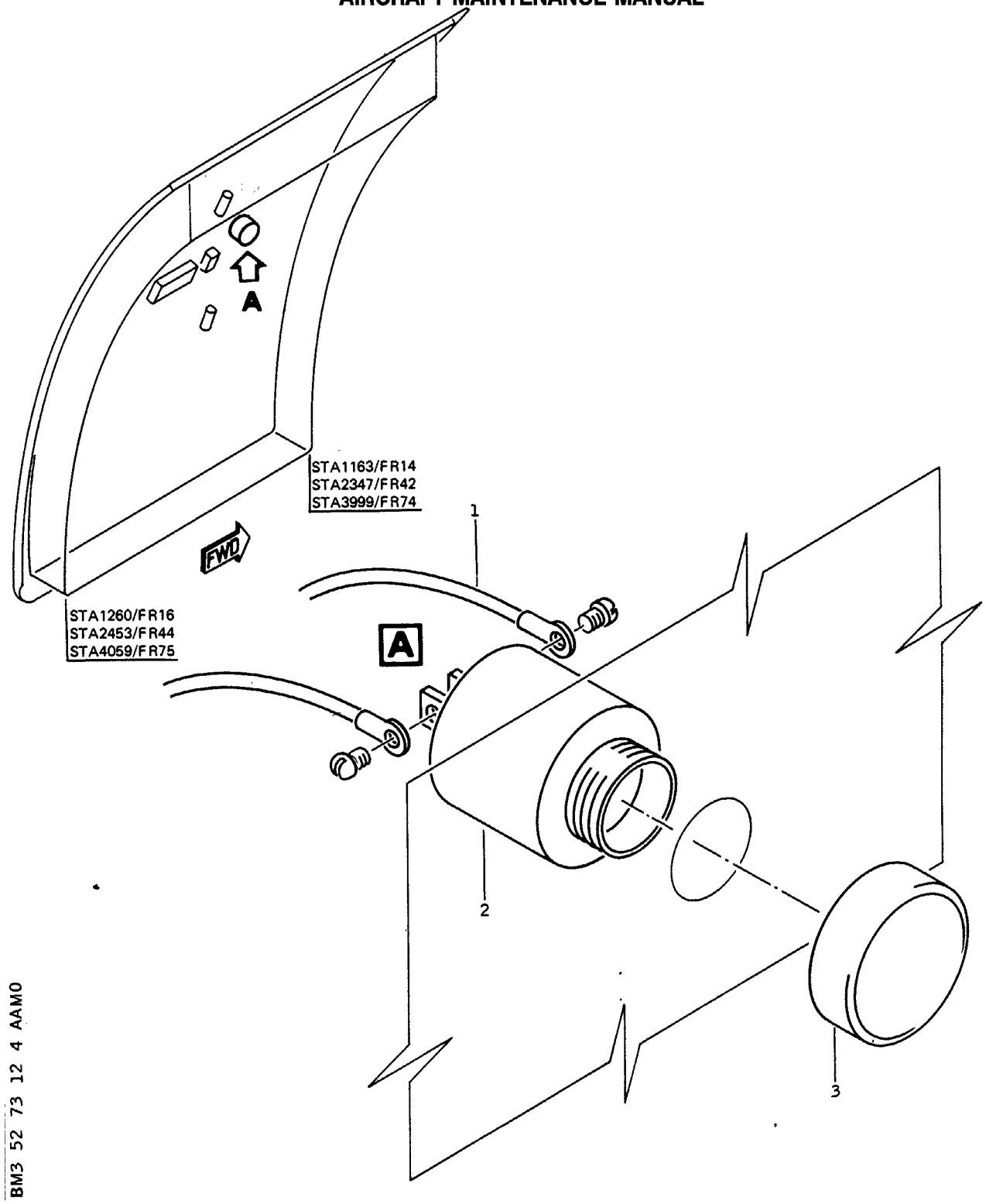
PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

(4)Remove door lining for access to warning horn as follows:

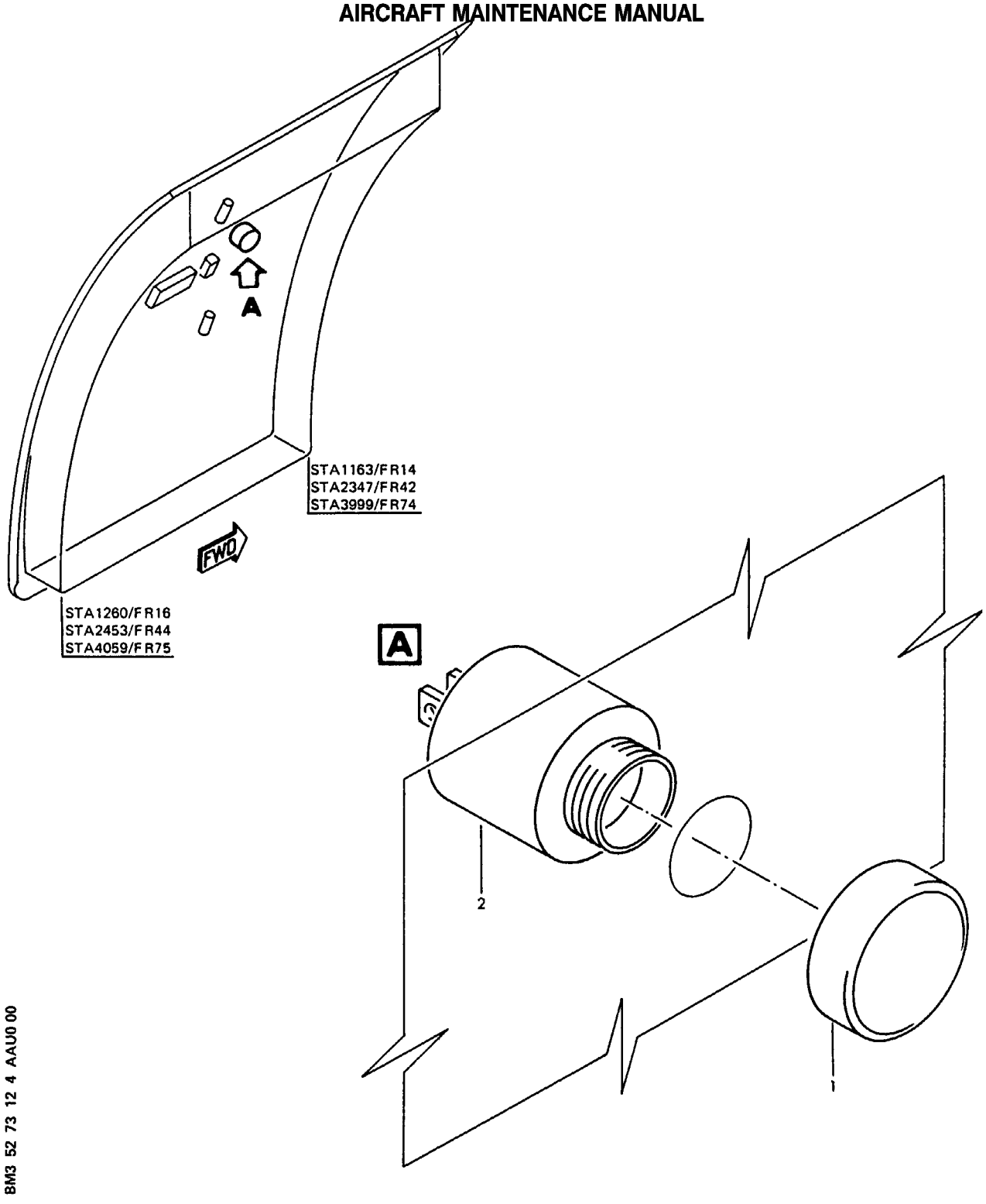
(a)FWD Passenger/Crew Door LH and RH

Warning horn 11WN, 12WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).

(b)AFT Passenger/Crew Door LH and RH



Warning Horn
Figure 401



Warning Horn
Figure 402

Warning horn 35WN, 36WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).

(c)Emergency Exit LH and RH
Warning horn 27WN, 28WN - Intermediate Lining (Ref. 52-23-13, P. Block 401).

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R A. Job Set-Up
R (1)Position access platform, and open relevant door.
R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).
R (2)Safety emergency escape slide, emergency operation cylinder and warning system (Ref. 52-10-00, P. Block 301).
R (3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
131VU	ASPSU SUPPLY	3WN	316/C54

R (4)Remove door lining for access to warning horn as follows:
R (a)FWD Passenger/Crew Door LH and RH
R Warning horn 11WN, 12WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).
R (b)AFT Passenger/Crew Door LH and RH
R Warning horn 35WN, 36WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).
R (c)Emergency Exit LH and RH
R Warning horn 27WN, 28WN - Intermediate Lining (Ref. 52-23-13, P. Block 401).

**ON A/C 001-100,

B. Removal
(1)Remove and retain screws (2) and disconnect electrical wires (1) from warning horn (4).
(2)Remove and retain ring nut (3).
(3)Remove warning horn (4).

C. Installation
(1)Install warning horn (4) with ring nut (3) using thread locking compound (Material No. 08-007).
(2)Connect electrical wires (1) to warning horn (4) using screws (2).

D. Test
(1)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(2)Remove safety clips, tags and close the following circuit breakers: 1WN and 2WN.
(3)Depress relevant test switch (adjacent to warning light).
(4)Check that the warning horn sounds.

E. Close-Up
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).
(1)Arm emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Install door lining
(a)For FWD, MID and AFT Passenger/Crew Doors (Ref. 52-10-13, P. Block 401).
(b)For Emergency Exit (Ref. 52-22-13, P. Block 401).
(4)Close door and remove access platform.
(5)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

**ON A/C 101-200,

B. Removal
(1)Remove and retain ring nut (1).
(3)Remove warning horn (2).

C. Installation
(1)Install warning horn (2) with retained ring nut (1). Use thread locking compound (Material No. 08-007).

D. Close-Up
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).
(1)Arm emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)Install door lining
(a)For FWD, MID and AFT Passenger/Crew Doors (Ref. 52-10-13, P. Block 401).
(b)For Emergency Exit (Ref. 52-22-13, P. Block 401).
(4)Close door and remove access platform.

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE
R ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00,
R P. BLOCK 301 AND 52-23-00, P. BLOCK 301).

R 1. Reason for the Job
R Removal/Installation of the emergency escape slide system limit
R switches associated with the following doors:
R - FWD Passenger/Crew Doors
R - AFT Passenger/Crew Doors
R - Emergency Exits

R 2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4 to 5 m (14 to 16 ft.)
B.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.03 in.)
C.	Circuit Breaker Safety Clips and Tags
D. Material No. 05-027	Special Materials (Ref. 20-31-00)

R Referenced Procedures

- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-13, P. Block 401	Lining and Insulation
- 52-73-13, P. Block 501	Limit Switch

R 3. Procedure

R A. Job Set-Up
R (1)Position access platform
R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00,
R P. BLOCK 301 AND 52-23-00, P. BLOCK 301).
R (2)Safety emergency escape slide, door damper and emergency operation
R cylinder and door warning system (Ref. 52-10-00, P. Block 301 and
R 52-23-00, P. Block 301).
R (3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

R (4)Remove door lining for access to switches as follows:
R (a)FWD Passenger/Crew Door LH and RH.
R Switches 9WN, 10WN - Guide Arm Lining
R Switches 13WN, 14WN - Center Lining, Upper Support Arm Lining
R (Ref. 52-10-13, P. Block 401).

(b)Aft Passenger/Crew Door LH and RH
Switches 33WN, 34WN - Guide Arm Lining
Switches 37WN, 38WN - Center Lining, Upper Support Arm Lining
(Ref. 52-10-13, P. Block 401).
(c)Emergency Exit LH and RH
Switches 25WN, 26WN - Guide Arm Lining
Switches 29WN, 30WN - Intermediate Lining (Ref. 52-23-13,
P. Block 401).

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE
R ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00,
R P. BLOCK 301 AND 52-23-00, P. BLOCK 301).

R 1. Reason for the Job
R Removal/Installation of the emergency escape slide system limit
R switches associated with the following doors:
R - FWD Passenger/Crew Doors
R - AFT Passenger/Crew Doors
R - Emergency Exits

R 2. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 4 to 5 m (14 to 16 ft.)
B.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.03 in.)
C.	Circuit Breaker Safety Clips and Tags
D. Material No. 05-027	Special Materials (Ref. 20-31-00)

R Referenced Procedures

- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-23-13, P. Block 401	Lining and Insulation
- 52-73-13, P. Block 501	Limit Switch

R 3. Procedure

R A. Job Set-Up
R (1)Position access platform
R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00,
R P. BLOCK 301 AND 52-23-00, P. BLOCK 301).
R (2)Safety emergency escape slide, door damper and emergency operation
R cylinder and door warning system (Ref. 52-10-00, P. Block 301 and
R 52-23-00, P. Block 301).

R (3)Open, safety and tag the following circuit breakers:

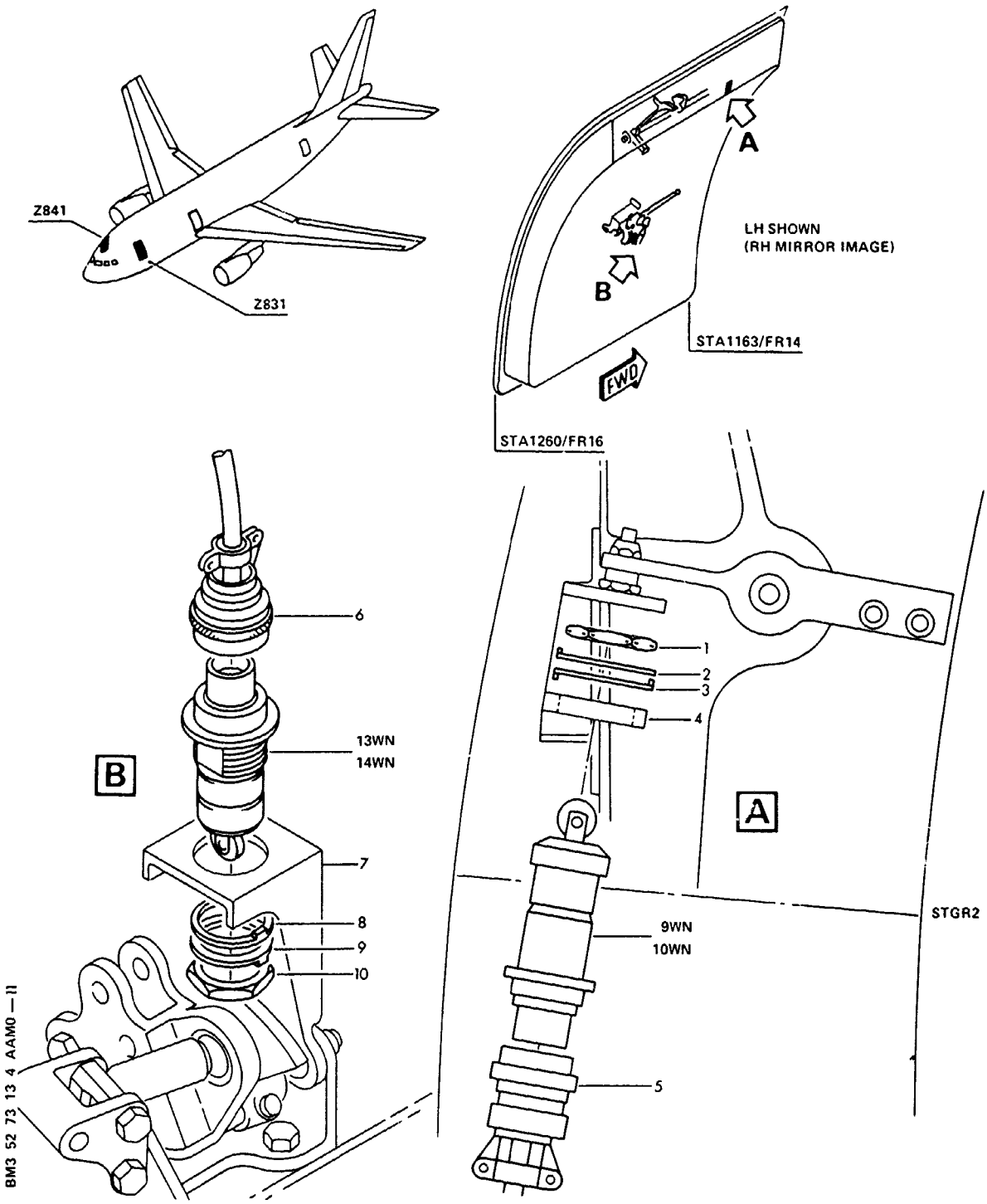
PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
131VU	ASPSU SUPPLY	3WN	316/C54

R (4)Remove door lining for access to switches as follows:
R (a)FWD Passenger/Crew Door LH and RH.
R Switches 9WN, 10WN - Guide Arm Lining
R Switches 13WN, 14WN - Center Lining, Upper Support Arm Lining
R (Ref. 52-10-13, P. Block 401).
R (b)Aft Passenger/Crew Door LH and RH
R Switches 33WN, 34WN - Guide Arm Lining
R Switches 37WN, 38WN - Center Lining, Upper Support Arm Lining
R (Ref. 52-10-13, P. Block 401).
R (c)Emergency Exit LH and RH
R Switches 25WN, 26WN - Guide Arm Lining
R Switches 29WN, 30WN - Intermediate Lining (Ref. 52-23-13,
R P. Block 401).

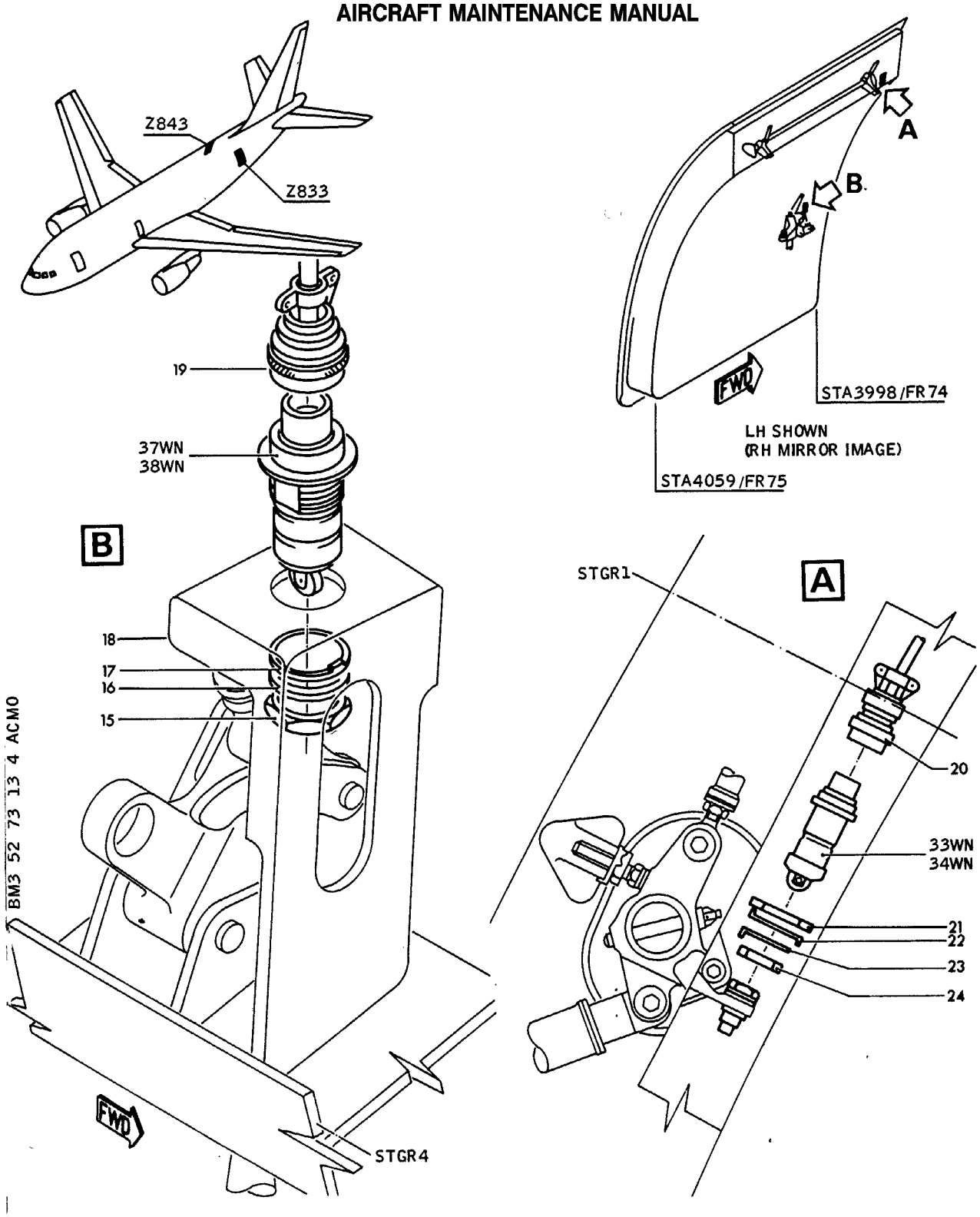
R **ON A/C ALL

(Ref. Fig. 401)
(Ref. Fig. 402)
(Ref. Fig. 403)

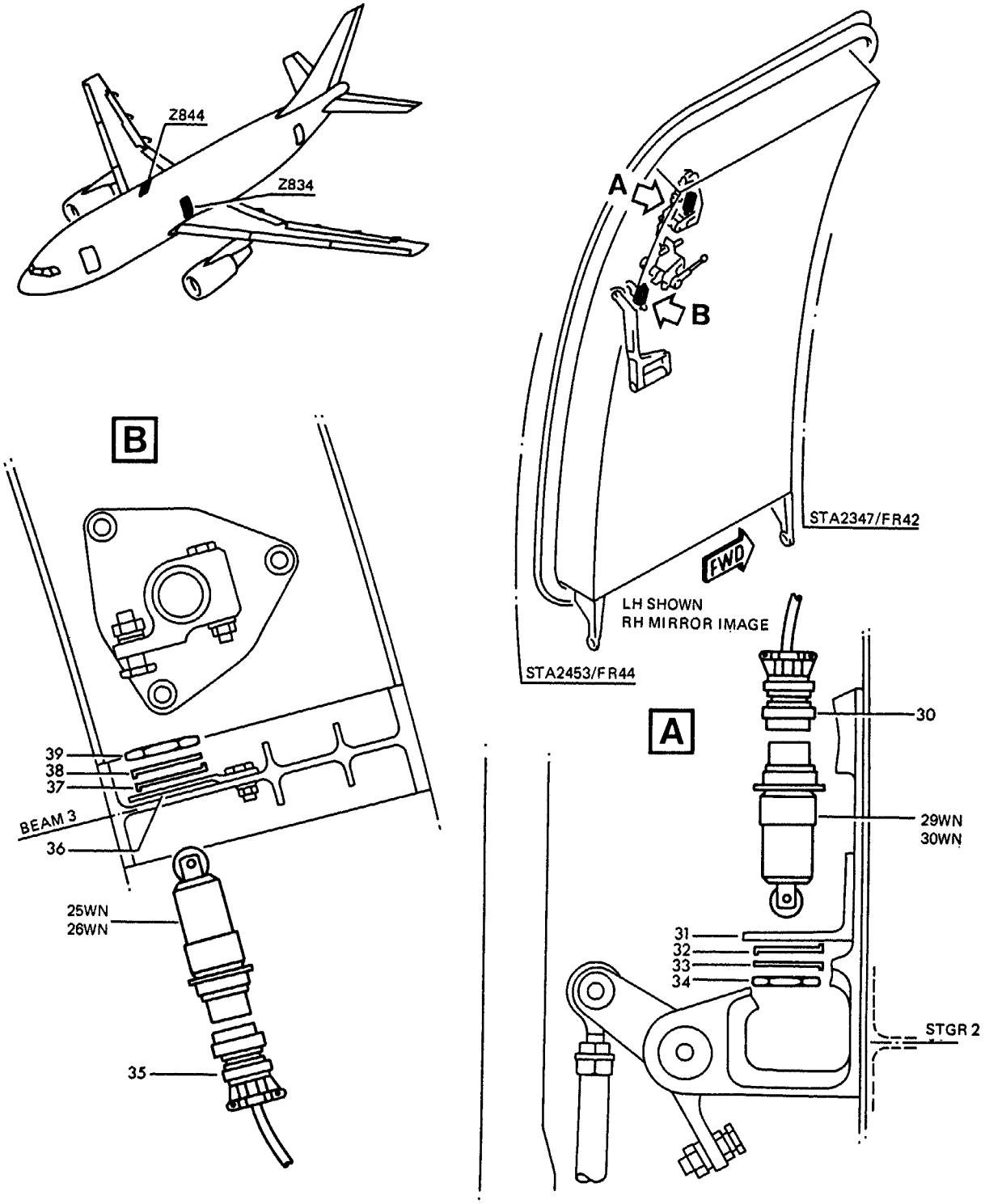
B. Removal
(1)FWD Passenger/Crew Doors (Ref. Fig. 401)
(a)Limit Switches 9WN and 10WN
1 Unlock door.
2 Disconnect and blank electrical connector (5).
3 Cut and remove lockwire, remove nut (1), lockwasher (2) and locating washer (3).
4 Remove switch from mounting bracket (4).
(b)Limit Switches 13WN and 14WN
1 Make certain that door is closed and locked.
2 Remove safety pin from emergency escape slide release mechanism.
3 Set emergency control handle to ARMED/FLIGHT.
4 Disconnect and blank electrical connector (6).
5 Cut and remove lockwire, remove nut (10), lockwasher (9) and locating washer (8).
6 Remove switch from bracket (7).
7 Set emergency control handle to DISARMED/PARK.
8 Insert safety pin in emergency escape slide release mechanism.
(2)AFT Passenger/Crew Doors (Ref. Fig. 402)
(a)Limit Switches 33WN and 34WN
1 Unlock door.
2 Disconnect and blank electrical connector (20).
3 Cut and remove lockwire, remove nut (24), lockwasher (23) and



FWD Passenger/Crew Doors - Limit Switches (9WN, 10WN)
Figure 401



AFT Passenger/Crew Doors - Limit Switches (33WN, 34WN)
Figure 402



Emergency Exits - Limit Switches
(25WN, 26WN, 29WN, 30WN)
Figure 403

locating washer (22).
4 Remove switch from bracket (21).
(b)Limit Switches 37WN and 38WN
1 Make certain that door is closed and locked.
2 Remove safety pin from emergency escape slide release mechanism.
3 Set emergency control handle to ARMED/FLIGHT.
4 Disconnect and blank electrical connector (19).
5 Cut and remove lockwire, remove nut (15), lockwasher (16) and locating washer (17).
6 Remove switch from bracket (18).
7 Set emergency control handle to DISARMED/PARK.
8 Insert safety pin in emergency escape slide release mechanism.
(3)Emergency Exits (Ref. Fig. 403)
(a)Limit Switches 25WN and 26WN
1 Unlock door.
2 Disconnect and blank electrical connector (35).
3 Cut and remove lockwire, remove nut (39), lockwasher (38) and locating washer (37).
4 Remove switch from bracket (36).
(b)Limit Switches 29WN and 30WN
1 Make certain that door is closed and locked.
2 Remove safety pin from emergency escape slide release mechanism.
3 Set emergency control handle to ARMED/FLIGHT.
4 Disconnect and blank electrical connector (30).
5 Cut and remove lockwire, remove nut (34), lockwasher (33) and locating washer (32).
6 Remove switch from bracket (31).
7 Set emergency control handle to DISARMED/PARK.
8 Insert safety pin in emergency escape slide release mechanism.

C. Installation
(1)FWD Passenger/Crew Doors (Ref. Fig. 401)
(a)Limit Switches 9WN and 10WN
1 Position switch in mounting bracket (4).
2 Install locating washer (3), lockwasher (2) and nut (1).
3 Tighten nut (1) and wirelock.
4 Remove blank and connect electrical connector (5).
5 Carry out adjustment and test of switch (Ref. 52-73-13, P. Block 501).
(b)Limit Switches 13WN and 14WN
1 Remove safety pin from emergency escape slide release mechanism.
2 Set emergency control handle to ARMED/FLIGHT.
3 Position switch in mounting bracket (7).
4 Install locating washer (8), lockwasher (9) and nut (10).
5 Tighten nut (10) and wirelock.
6 Remove blank and connect electrical connector (6).
7 Set emergency control handle to DISARMED/PARK.
8 Insert safety pin in emergency escape slide release mechanism.
9 Carry out test of switch (Ref. 52-73-13, P. Block 501).
NOTE : Switches 13WN and 14WN are not adjustable.
(2)AFT Passenger/Crew Doors (Ref. Fig. 402)

(a)Limit Switches 33WN and 34WN
1 Position switch in mounting bracket (21).
2 Install locating washer (22), lockwasher (23) and nut (24).
3 Tighten nut (24) and wirelock.
4 Remove blank and connect electrical connector (20).
5 Carry out adjustment and test of switch (Ref. 52-73-13, P. Block 501).

(b)Limit Switches 37WN and 38WN
1 Remove safety pin from emergency escape release mechanism.
2 Set emergency control handle to ARMED/FLIGHT.
3 Position switch in mounting bracket (18).
4 Install locating washer (17), lockwasher (16) and nut (15).
5 Tighten nut (15) and wirelock.
6 Connect electrical connector (19) to switch.
7 Set emergency control handle to DISARMED/PARK.
8 Insert safety pin in emergency escape slide release mechanism.
9 Carry out adjustment and test of switch (Ref. 52-73-13, P. Block 501).

(3)Emergency Exits (Ref. Fig. 403)

(a)Limit Switches 25WN and 26WN
1 Position switch in mounting bracket (36).
2 Install locating washer (37), lockwasher (38) and nut (39).
3 Tighten nut (39) and wirelock.
4 Remove blank and connect electrical connector (35).
5 Carry out adjustment and test of switch (Ref. 52-73-13, P. Block 501).

(b)Limit Switches 29WN and 30WN
1 Remove safety pin from emergency escape release mechanism.
2 Set emergency control handle to ARMED/FLIGHT.
3 Position switch in mounting bracket (31).
4 Install locating washer (32), lockwasher (33) and nut (34).
5 Tighten nut (34) and wirelock.
6 Remove blank and connect electrical connector (30).
7 Set emergency control handle to DISARMED/PARK.
8 Insert safety pin in emergency escape slide release mechanism.
9 Carry out adjustment and test of switch (Ref. 52-73-13, P. Block 501).

D. Remove the tags and close the circuit breakers: 1WN and 2WN.

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R D. Remove the tags and close the circuit breakers: 1WN, 2WN and 3WN.

R **ON A/C ALL

E. Test
(1)For Adjustment/Test procedures refer to 52-73-13, P. Block 501.

F. Close-Up
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND 52-23-00, P. BLOCK 301).
(1)Arm door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301 AND 52-23-00, P. BLOCK 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)On all Passenger/Crew Doors and Emergency Exit:
Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(4)Install door lining:
(a)For FWD and AFT Passenger/Crew Doors (Ref. 52-10-13, P. Block 401).
(b)For Emergency Exit (Ref. 52-23-13, P. Block 401).
(5)Close door and remove access platform.

R **WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT**
R **MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY**
R **EXITS (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).**

R 1. Reason for the Job
R Adjustment and test of the emergency escape slide limit switches at the
R FWD and AFT Passenger/Crew and Emergency Exit Doors.

R 2. Equipment and Materials

R ITEM	DESIGNATION
R A.	Access Platform, 4 to 5 m (14 to 16 ft.)
R B. 35M5M01160001	Setting Tool - Microswitch Unit
R C.	Feeler Gage
R D.	Lockwire, Corrosion-Resistant Steel, Dia. 0.63 mm (0.03 in.)
R E.	Circuit Breaker Safety Clips and Tags

R Referenced Procedures

R - 24-41-00, P. Block 301	AC External Power Control
R - 25-61-20, P. Block 1	Passenger Compartment Escape Facilities
R - 25-61-21, P. Block 401	Dual Escape Slide
R - 25-61-22, P. Block 401	Slide/Raft
R - 25-61-23, P. Block 401	Overwing Escape Slide
R - 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
R - 52-10-13, P. Block 401	FWD, AFT Door Lining an d Insulation
R - 52-10-20, P. Block 501	FWD, AFT Door Locking Mechanism
R - 52-10-30, P. Block 501	FWD, AFT Emergency Escape Slide Release Mechanism
R - 52-23-00, P. Block 301	Emergency Exit - Special Precautions
R - 52-23-13, P. Block 401	Lining and Insulation
R - 52-23-21, P. Block 501	Locking Mechanism
R - 52-23-22, P. Block 501	Emergency Escape Slide Release Mechanism

R 3. Procedure

R A. Job Set-Up
R (1)Position access platform.
R **WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301**
R **AND REF. 52-23-00, P. BLOCK 301).**
R NOTE : Before commensing the operations detailed in this topic, make certain
R that the door locking and the emergency escape slide release
R mechanism of the door is correct (Ref. 52-10-20, P. Block 501,
R Ref. 52-10-30, P. Block 501, Ref. 52-23-21, P. Block 501,
R Ref. 52-23-22, P. Block 501).
R (2)Safety emergency escape slide, door damper and emergency operation
R cylinder and door warning system (Ref. 52-10-00, P. Block 301 and
R Ref. 52-23-00, P. Block 301).

(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM ! WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

(4)Remove door lining for access to switches as follows:
(a)FWD Passenger/Crew Door LH and RH
Switches 9WN, 10WN - Guide arm lining
Switches 13WN, 14WN - Center lining, upper support arm lining
(Ref. 52-10-13, P. Block 401).
(b)AFT Passenger/Crew Door LH and RH
Switches 33WN, 34WN - Guide arm lining
Switches 37WN, 38WN - Center lining, upper support arm lining
(Ref. 52-10-13, P. Block 401).
(c)Emergency Exit LH and RH
Switches 25WN, 26WN - Guide arm lining
Switches 29WN, 30WN - Intermediate lining (Ref. 52-23-13,
P. Block 401).

B. Adjustment

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R (3)Open, safety and tag the following circuit breakers:

R	PANEL	SERVICE	IDENT.	LOCATION
R	22VU	SLIDES/ARM ! WARN	1WN	205/E23
R	22VU	SLIDES/HORN	2WN	205/E22
R	131VU	ASPSU SUPPLY	3WN	316/C54

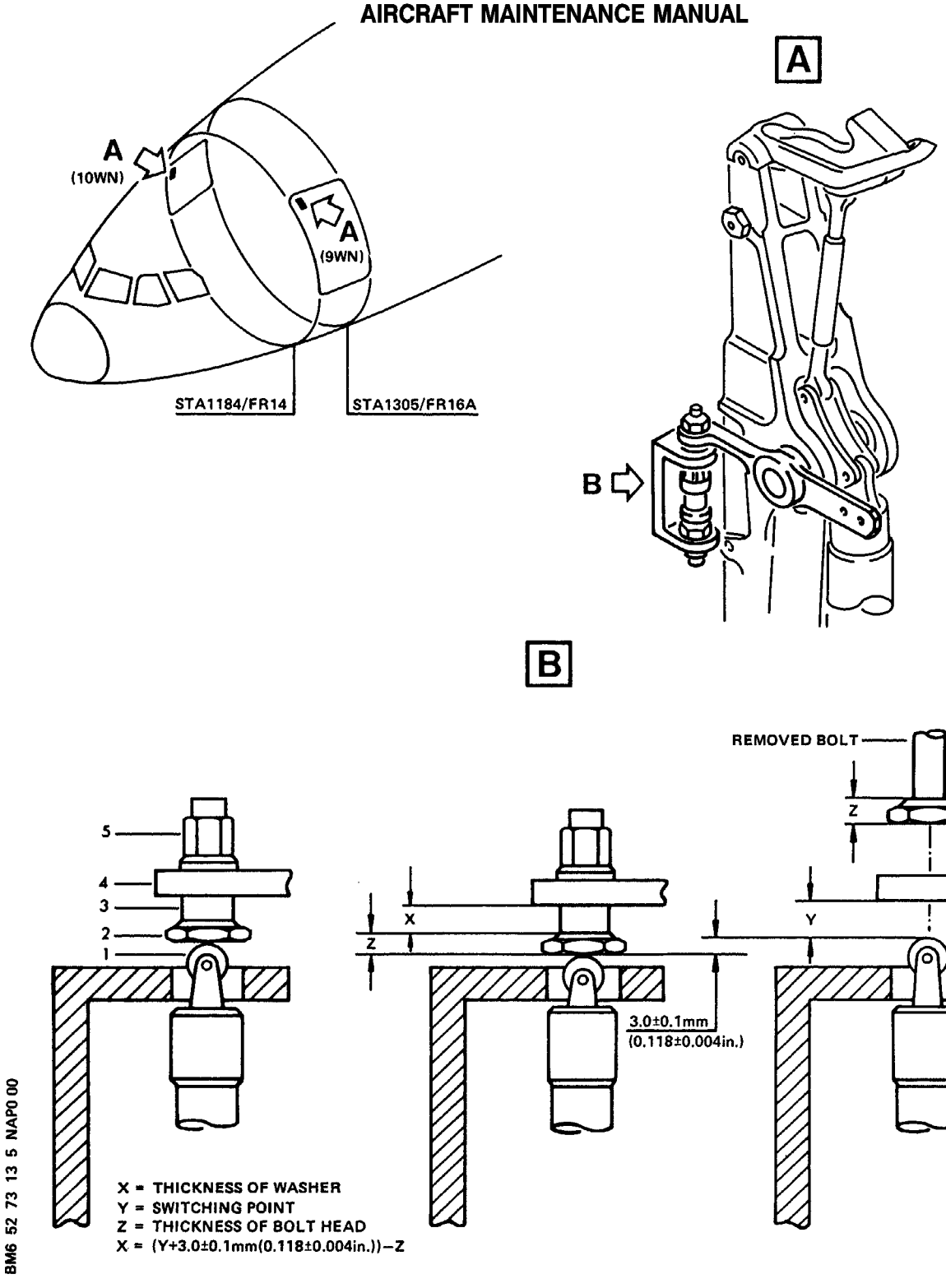
R (4)Remove door lining for access to switches as follows:
R (a)FWD Passenger/Crew Door LH and RH
R Switches 9WN, 10WN - Guide arm lining
R Switches 13WN, 14WN - Center lining, upper support arm lining
R (Ref. 52-10-13, P. Block 401).
R (b)AFT Passenger/Crew Door LH and RH
R Switches 33WN, 34WN - Guide arm lining
R Switches 37WN, 38WN - Center lining, upper support arm lining
R (Ref. 52-10-13, P. Block 401).
R (c)Emergency Exit LH and RH
R Switches 25WN, 26WN - Guide arm lining
R Switches 29WN, 30WN - Intermediate lining (Ref. 52-23-13,
R P. Block 401).

R B. Adjustment

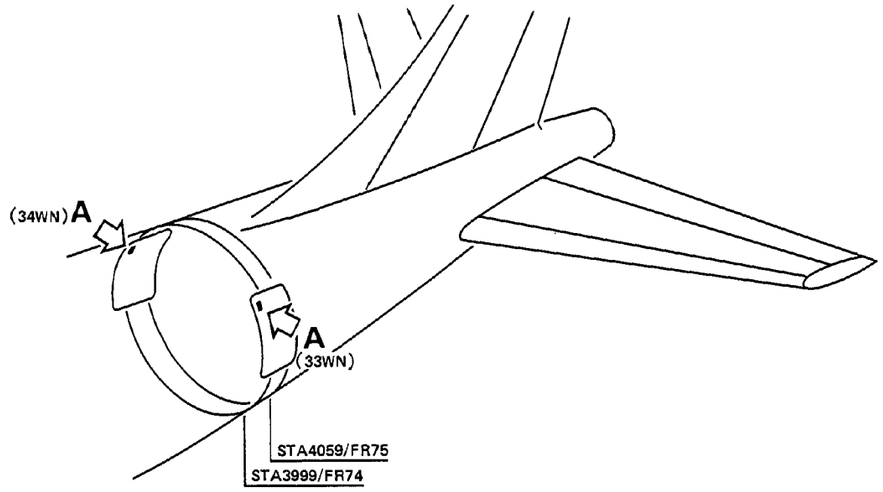
R **ON A/C ALL

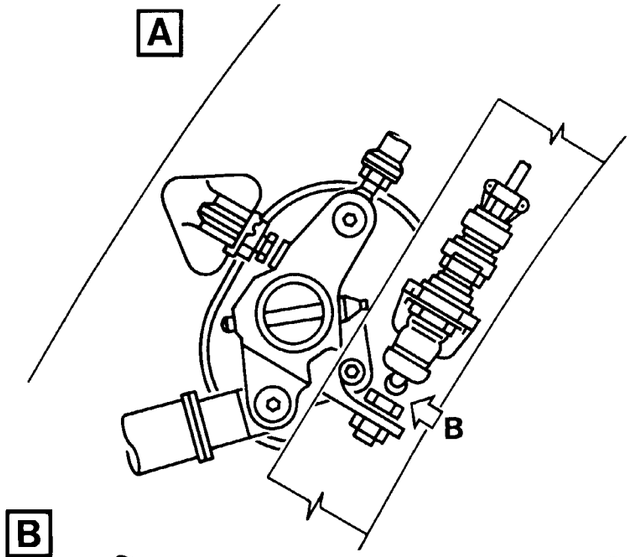
(Ref. Fig. 501)
(Ref. Fig. 502)
(Ref. Fig. 503)

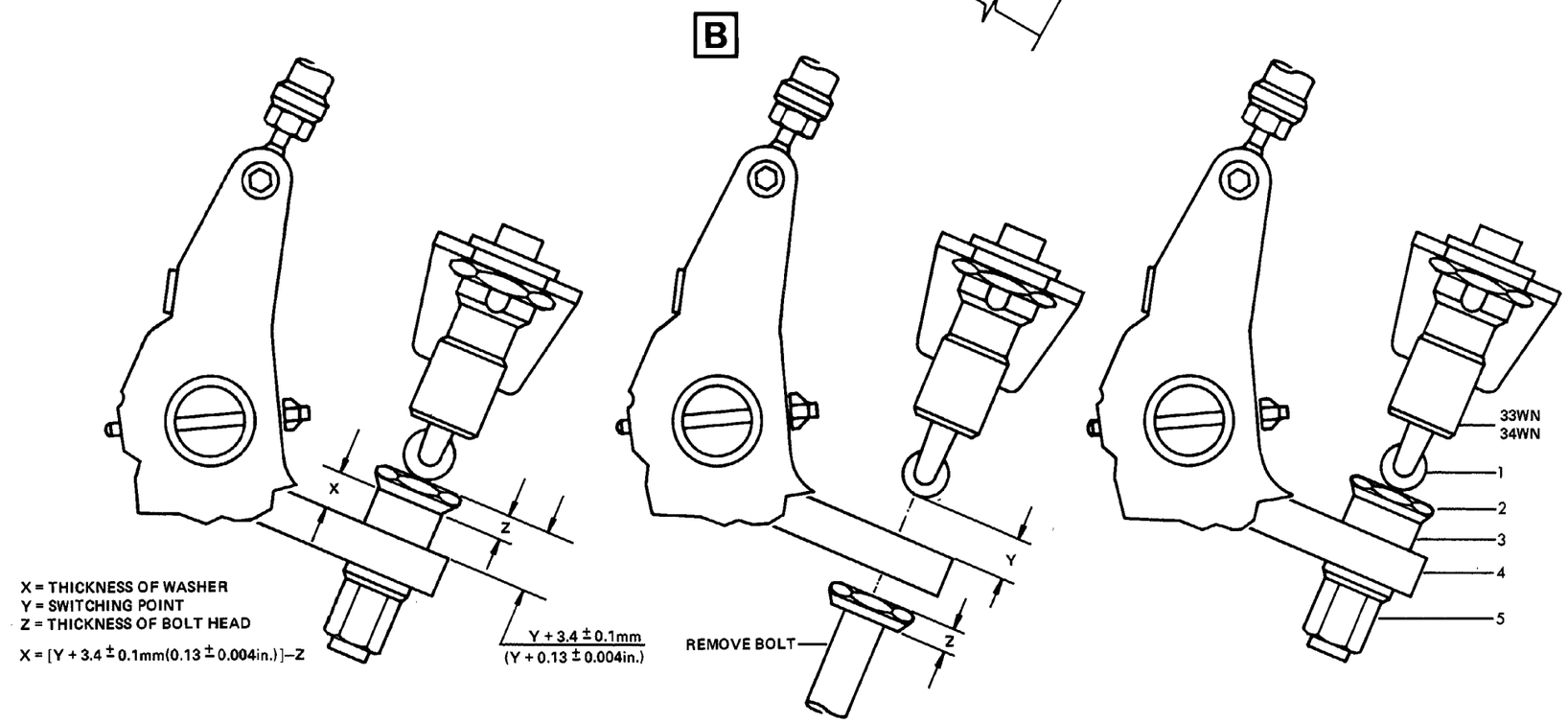
(1)FWD Passenger/Crew Doors
(a)Limit Switches 9WN and 10WN (Ref. Fig. 501)
1 Remove door lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Remove nut (5), bolt (2) and washer (3) from operating lever (4).
4 Lock door.
5 Disconnect electrical connector from switch and connect setting tool PN 35M5M01160001.
6 Press in switch roller (1) manually.
7 Release switch roller (1) until initial switching point is reached (visible signal on setting tool).
NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.
8 Using feeler gage, record gap Y between switch roller (1) and operating lever (4).
9 Determine distance X from recorded gap Y and add 3.0 ±0.1 mm (0.118 ±0.004 in.). Subtract bolt head thickness Z.
10 Unlock door.
11 Install washer of thickness X determined in step 9, bolt (2) and nut (5) to operating lever (4).
12 Disconnect setting tool PN 35M5M01160001 and reconnect electrical connector.
13 Adjust indicator window (Ref. 52-10-20, P. Block 501).
14 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
15 Install door lining (Ref. 52-10-13, P. Block 401).
(b)Limit switches 13WN and 14WN are not adjustable.
(2)AFT Passenger/Crew Doors
(a)Limit Switches 33WN and 34WN (Ref. Fig. 502)
1 Remove door lining (Ref. 52-10-13, P. Block 401).
2 Unlock door.
3 Remove nut (5), bolt (2) and washer (3) from operating lever (4).
4 Lock door.
5 Disconnect electrical connector from switch and connect setting tool PN 35M5M01160001.
6 Fully press in switch roller (1) manually.
7 Release switch roller (1) until initial switching point is reached (visible signal on setting tool).
NOTE : Make certain that contact surfaces of switch roller and operating lever mechanism are clean.
8 Using feeler gage, record gap Y between switch roller (1) and operating lever (4).
9 Determine distance X from recorded gap Y and add 3.4 ±0.1 mm (0.13 ±0.004 in.). Subtract bolt head thickness Z.



FWD Passenger/Crew Doors -
Limit Switches (9WN,10WN)
Figure 501





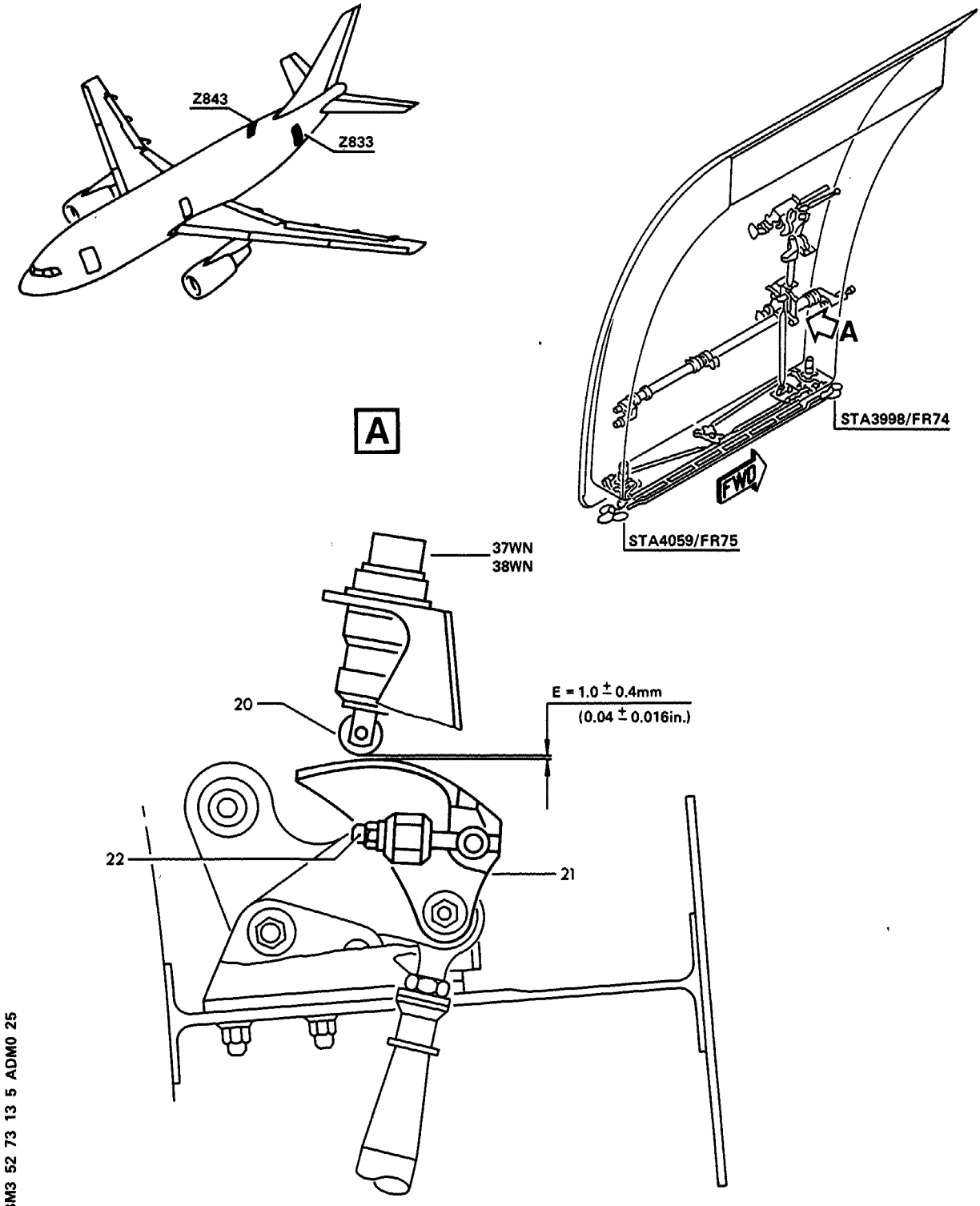


BM3 52 73 13 5 ACU0 16

AFT Passenger/Crew Doors -
Limit Switches (33WN,34WN)
Figure 502

EFFECTIVITY: ALL

PIA



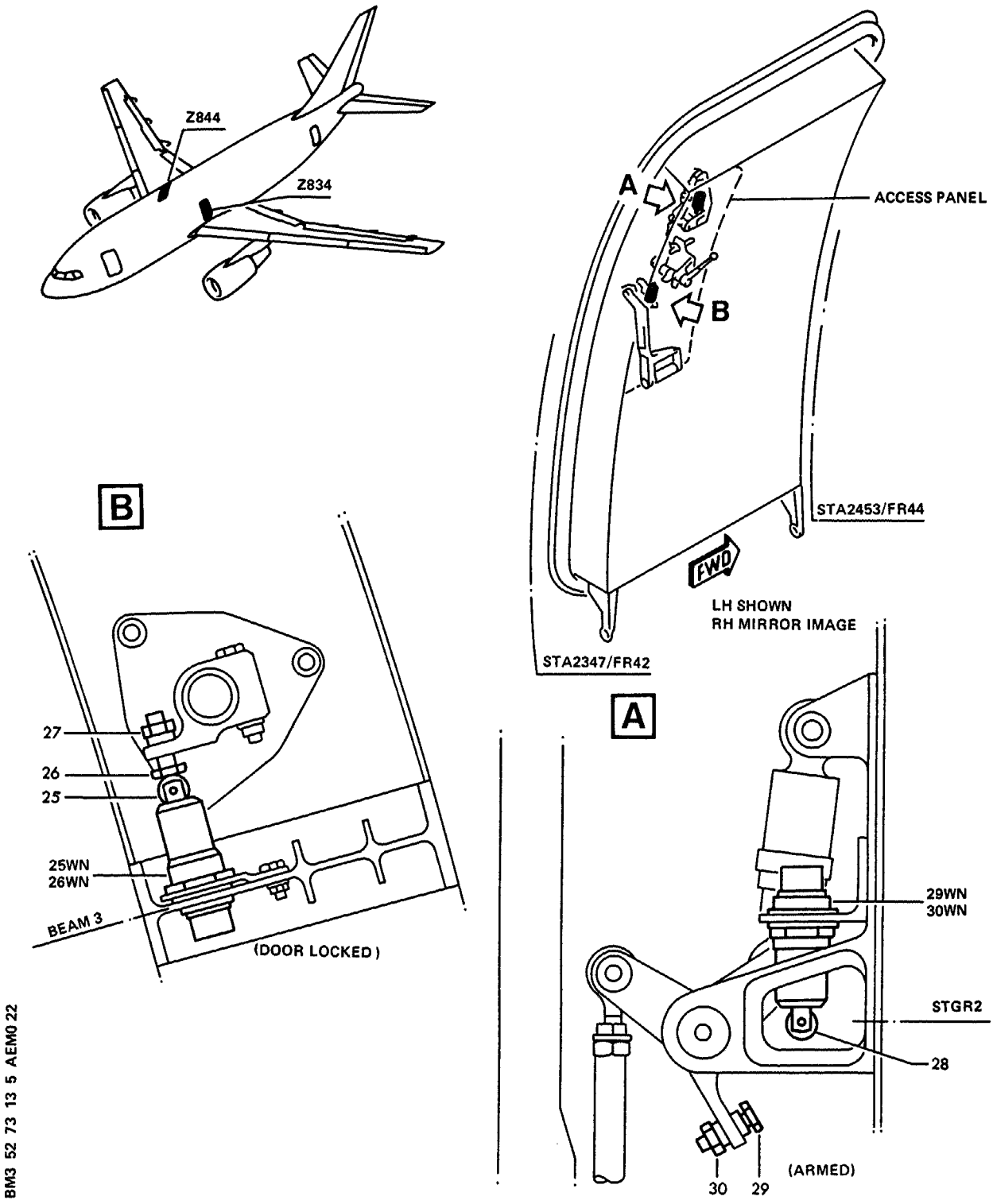
AFT Passenger/Crew Doors -
Limit Switches (37WN,38WN)
Figure 503

10 Unlock door.
11 Install washer of thickness X determined in step 9, bolt (2) and nut (5) to operating lever (4).
12 Disconnect setting tool PN 35M5M01160001 and reconnect electrical connector.
13 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
14 Adjust indicator window (Ref. 52-10-20, P. Block 501).
15 Install door lining (Ref. 52-10-13, P. Block 401).

(b)Limit Switches 37WN and 38WN (Ref. Fig. 503)
1 Remove door lining (Ref. 52-10-13, P. Block 401) and container with dual escape slide (Ref. 25-61-21, P.Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401).
2 Close and lock door and set emergency control handle to "DISARMED".
3 Fully press in switch manually.
4 Using feeler gage, check that gap 'E' between switch roller (20) and switch operating cam (21) is 1.0 ±0.4 mm (0.04 ±0.016 in.).
5 If measurement exceeds limits, adjust screw (22) until measurement is within limits.
6 Insert safety pin (Ref. 52-10-00, P. Block 301).
7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
8 Install either container with dual escape slide (Ref. 25-61-21, P. Block 401) or container with slide/raft (Ref. 25-61-22, P. Block 401) and door lining (Ref. 52-10-13, P. Block 401). (Ref. Fig. 504)

(3)Emergency Exits (Ref. Fig. 504)
(a)Limit Switches 25WN and 26WN
1 Remove slide cover (Ref. 52-23-13, P. Block 401) and overwing escape slide (Ref. 25-61-23, P. Block 401).
2 Slacken locknut (27) and fully screw in bolt (26) (clockwise).
3 Make certain that contact surfaces of bolt (26) and switch roller (25) are clean.
4 Make certain that emergency exit is closed and locked.
5 Screw out bolt (26) (counterclockwise) until its contact surface is within 1 mm (0.039 in.) of switch roller (25).
NOTE : Do not lock with locknut (27) at this stage.
6 Screw out bolt (26) (counterclockwise) 5 full turns, lock with locknut (27) and safety with lockwire.
7 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
8 Install overwing escape slide (Ref. 25-61-23, P. Block 401) and slide cover (Ref. 52-23-13, P. Block 401).

(b)Limit Switches 29WN and 30WN
1 Make certain that emergency exit is correctly closed and the emergency control handle is in "DISARMED" position.
2 Remove slide cover (Ref. 52-23-13, P. Block 401) overwing escape slide (Ref. 25-61-23, P. Block 401) emergency control handle (Ref. 52-23-22, P. Block 401) and access panel.
3 Slacken locknut (30) and fully screw in adjusting screw (29) (clockwise).



Emergency Exits - Limit Switches
(25WN,26WN,29WN,30WN)
Figure 504

4 Make certain that contact surfaces of adjusting screw (29) and switch roller (28) are clean.
5 Screw out adjusting screw (29) (counterclockwise) until its contact surface is within 1 mm (0.039 in.) of switch roller (28).
NOTE : Do not lock with locknut (30) at this stage.
6 Screw out adjusting screw (29) (counterclockwise) 5 full turns, lock with locknut (30) and safety with lockwire.
7 Install access panel and emergency control handle (Ref. 52-23-22, P. Block 401) and insert safety pin (Ref. 52-23-00, P. Block 301).
8 Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
9 Install overwing escape slide (Ref. 25-61-23, P. Block 401) and slide cover (Ref. 52-23-13, P. Block 401).

(Ref. Fig. 505)
(1)Make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
21VU	ECAM/CTL PNL LT	12WT	108/B01
21VU	ECAM/DISPLAY UNIT/L	7WT	108/B02
21VU	ECAM/DISPLAY UNIT/R	8WT	108/B03
21VU	ECAM/SGU/1	11WT1	108/B04
21VU	ECAM/SGU/2	11WT2	108/B05
21VU	ECAM/FLT WARN MONITOR	4WW	108/B06
21VU	ECAM/FLT WARN MONITOR	24WW	108/B07
21VU	ECAM/FWC 1	7WW	108/B08
21VU	ECAM/SDAC/26 V AC/NORM/1	3WV1	109/A02
21VU	ECAM/SDAC/26 V AC/NORM/2	3WV2	109/A03
21VU	ECAM/SDAC/26 V AC/ESS	5WV	109/A04
21VU	ECAM/SDAC/PWR SUPPLY	6WV	109/A05
21VU	ECAM/FWC 2	32WW	109/A08

(2)Remove safety clips and tags and close the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM ! WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R (1)Make certain that the following circuit breakers are closed:

R PANEL	SERVICE	IDENT.	LOCATION
R 21VU	ECAM/CTL PNL LT	12WT	108/B01
R 21VU	ECAM/DISPLAY UNIT/L	7WT	108/B02
R 21VU	ECAM/DISPLAY UNIT/R	8WT	108/B03

PANEL	SERVICE	IDENT.	LOCATION
21VU	ECAM/SGU/1	11WT1	108/B04
21VU	ECAM/SGU/2	11WT2	108/B05
21VU	ECAM/FWC 1/NORM	6WW	108/B06
21VU	ECAM/FWC 1/EMER	7WW	108/B07
21VU	ECAM/WLDP SUPPLY/NORM	4WW	108/B08
21VU	ECAM/WLDP SUPPLY/ESS	5WW	108/B09
21VU	ECAM/FLT WARN MONITOR	24WW	108/B10
21VU	ECAM/SDAC/26 V AC/NORM/1	3WV1	109/A02
21VU	ECAM/SDAC/26 V AC/NORM/2	3WV2	109/A03
21VU	ECAM/SDAC/26 V AC/ESS	5WV	109/A04
21VU	ECAM/SDAC/PWR SUPPLY	6WV	109/A05
21VU	ECAM/AUTO CALL OUT	1WK	109/A06
21VU	ECAM/FWC 2/NORM	32WW	109/A07
21VU	ECAM/FWC 2/EMER	33WW	109/A08

(2)Remove safety clips and tags and make certain that the following circuit breakers are closed:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM ! WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
131VU	ASPSU SUPPLY	3WN	316/C54

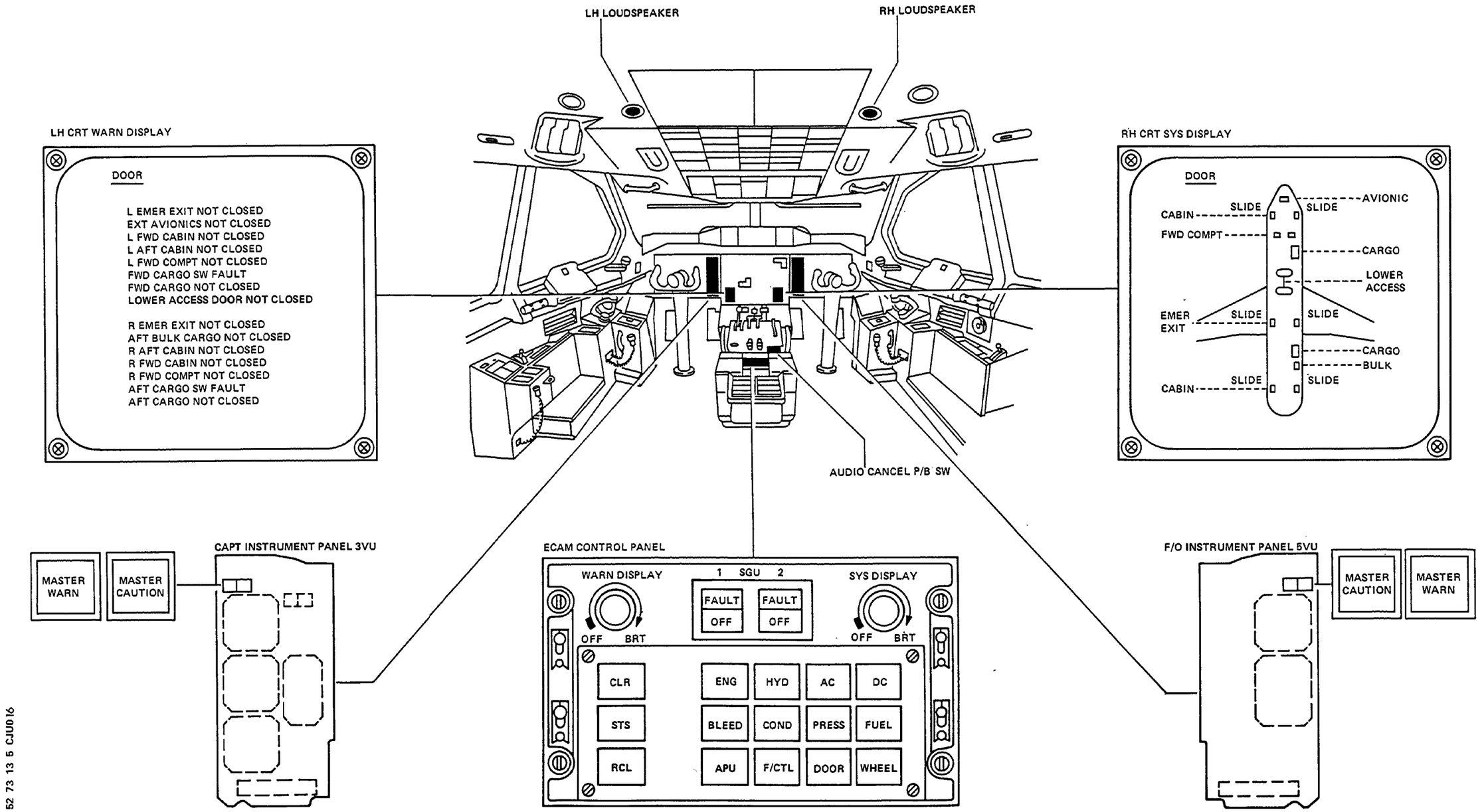
**ON A/C ALL

(3)Make certain that doors associated with switches to be tested are closed and locked.
(4)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(5)Make certain that electronics racks ventilation is correct.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND 52-23-00, P. BLOCK 301).
NOTE : The following test procedures must be performed after removal/ installation or adjustment of any limit switch.
NOTE : When testing at FWD and/or AFT Passenger/Crew Door(s), the emergency operation cylinder must be disarmed (Ref. 52-10-00, P. Block 301).
NOTE : When lowering FWD and/or AFT Passenger/Crew Door(s), make certain that linkage guide rollers are properly located in sliders and slide operating cylinder is safetied (Ref. 25-61-20, P. Block 1).

**ON A/C 001-100,

ACTION	RESULT
1. On LH FWD Passenger/Crew Door - Remove safety pin for emergency control handle and set emergency	On RH CRT SYS DISPLAY - caption SLIDE comes on (white).

ACTION	RESULT
control handle to "ARMED".	
WARNING : DO NOT OPEN DOOR.	
2. Unlock interior control handle. max. 100 mm (3.9 in.).	On LH FWD Passenger/Crew Door - warning light comes on and warning horn sounds. In the cockpit - a single chime sounds and the MASTER CAUT P/BSW on CAPT main instrument panel 3VU and F/O main instrument panel 5VU come on (amber) On RH CRT SYS DISPLAY - caption CABIN (LH FWD), line and symbol amber.
3. Press DOOR P/BSW on ECP.	On LH CRT WARN DISPLAY - caption L FWD CABIN NOT CLOSED comes on (amber).
4. Lock interior control handle, set emergency control handle to "DISARMED" and insert safety pin for emergency control handle.	On LH FWD Passenger/Crew Door - warning light goes off and warning horn cease. On LH CRT WARN DISPLAY - caption L FWD CABIN NOT CLOSED goes off. ON RH CRT SYST DISPLAY - caption CABIN (LH FWD) and line white, symbol green and caption SLIDE goes off.
5. Press CLEAR P/BSW on ECP.	DOOR light on ECP and MASTER CAUT switch lights go off.
6. Repeat steps 1 thru 5 for RH FWD and AFT Passenger/Crew and Emergency Exits.	
**ON A/C 101-200,	



Door Warning System - Cockpit Displays
Figure 505

ACTION	RESULT
1. On LH FWD Passenger/Crew Door - Remove safety pin for emergency control handle and set emergency control handle to "ARMED".	On RH CRT SYS DISPLAY - caption SLIDE comes on (white).
WARNING : DO NOT OPEN DOOR.	
2. Unlock interior control handle. max. 100 mm (3.9 in.).	On LH FWD Passenger/Crew Door - warning light comes on. In the cockpit - a single chime sounds and the MASTER CAUT P/BSW on CAPT main instrument panel 3VU and F/O main instrument panel 5VU come on (amber). On RH CRT SYS DISPLAY - caption CABIN (LH FWD), line and symbol amber.
3. Press DOOR P/BSW on ECP.	On LH CRT WARN DISPLAY - caption L FWD CABIN NOT CLOSED comes on (amber).
4. Lock interior control handle, set emergency control handle to "DISARMED" and insert safety pin for emergency control handle.	On the door - warning light goes off. On LH CRT WARNING DISPLAY - caption L FWD CABIN NOT CLOSED goes off. ON RH CRT SYST DISPLAY - caption CABIN (LH FWD) and line white, symbol green and caption SLIDE goes off.
5. Press CLEAR P/BSW on ECP.	DOOR light on ECP and MASTER CAUT switch lights go off.
6. Repeat steps 1 thru 5 for RH FWD and AFT Passenger/Crew and Emergency Exits.	

**ON A/C ALL

D. Close-Up

(1) De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301 AND 52-23-00, P. BLOCK 301).

(2) Arm emergency operation cylinder, activate emergency escape slide and door warning system (Ref. 52-10-00, P. Block 301).

(3) Make certain that work area is clean and clear of tools and miscellaneous items of equipment.

(4) Remove access platform.

TEST SWITCH - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS (REF. 52-10-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 5.2 m (17 ft.)
B.	Circuit Breaker Safety Clips and Tags
C. Material No. 05-027	Special Materials (Ref. 20-31-00)

Referenced Procedures

- 24-41-00, P. Block 301	AC External Power Control
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-13, P. Block 401	Lining and Insulation

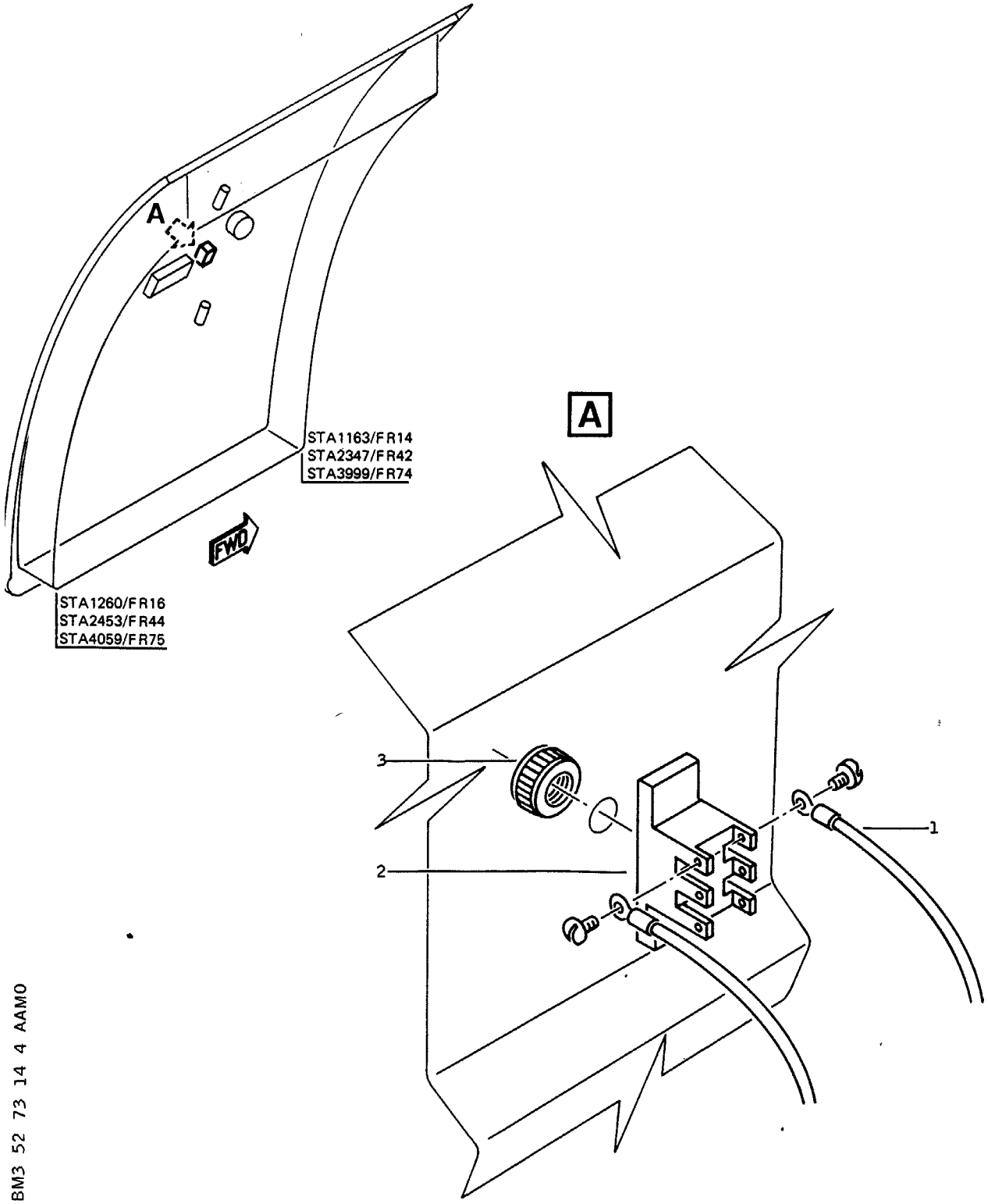
2. Procedure
(Ref. Fig. 401)

A. Job Set-Up
(1)Position access platform and open relevant door.
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).
(2)Safety emergency escape slide, door damper and emergency operation cylinder and warning system (Ref. 52-10-00, P. Block 301).
(3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

(4)Remove door lining for access to test switch as follows:
(a)FWD Passenger/Crew Door LH and RH.
Switches 39WN, 40WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).
(b)AFT Passenger/Crew Door LH and RH
Switches 45WN, 46WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).
(c)Emergency Exit LH and RH
Switches 43WN, 44WN - Intermediate Lining (Ref. 52-23-13, P. Block 401).

R **ON A/C 105-200,



Test Switch
Figure 401

R Post SB 52-2068 For A/C 105-200,

R A. Job Set-Up
R (1)Position access platform and open relevant door.
R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).
R (2)Safety emergency escape slide, door damper and emergency operation cylinder and warning system (Ref. 52-10-00, P. Block 301).
R (3)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22
131VU	ASPSU SUPPLY	3WN	316/C54

R (4)Remove door lining for access to test switch as follows:
R (a)FWD Passenger/Crew Door LH and RH.
R Switches 39WN, 40WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).
R (b)AFT Passenger/Crew Door LH and RH
R Switches 45WN, 46WN - Center Lining, Upper Support Arm Lining (Ref. 52-10-13, P. Block 401).
R (c)Emergency Exit LH and RH
R Switches 43WN, 44WN - Intermediate Lining (Ref. 52-23-13, P. Block 401).

**ON A/C 001-100,

B. Removal
(1)Disconnect electrical wires (1) from test switch (2).
(2)Remove ring nut (3) and test switch (2).

C. Installation
(1)Install test switch (2) and secure with ring nut (3).
(2)Connect electrical wires (1) to test switch (2).

D. Test
(1)Remove safety clips and tags and close circuit breakers 1WN and 2WN.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Depress test switch and verify that adjacent warning light is illuminated and warning horn is sounded.

E. Close-Up
WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).
(1)Arm door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).

(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)On all Passenger/Crew Doors and Emergency Exits:
Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(4)Install door lining
(a)For FWD and AFT Passenger/Crew Doors (Ref. 52-10-13, P. Block 401).
(b)For Emergency Exit LH and RH (Ref. 52-23-13, P. Block 401).
(5)Close door and remove access platform.
(6)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

**ON A/C 101-200,

B. Removal
(1)Disconnect electrical wires (1) from test switch (2).
(2)Remove ring nut (3) and test switch (2).

C. Installation
(1)Install test switch (2) and secure with ring nut (3).
(2)Connect electrical wires (1) to test switch (2).

D. Test
(1)Remove safety clips and tags and close circuit breakers 1WN and 2WN.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Depress test switch and verify that adjacent warning light is illuminated.

E. Close-Up

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00, P. BLOCK 301).

(1)Arm door damper and emergency operation cylinder and door warning system (Ref. 52-10-00, P. Block 301).
(2)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(3)On all Passenger/Crew Doors and Emergency Exits:
Spray all components that have been removed/installed or handled during the operations covered by this topic with protective film (Material No. 05-027).
(4)Install door lining
(a)For FWD and AFT Passenger/Crew Doors (Ref. 52-10-13, P. Block 401).
(b)For Emergency Exit LH and RH (Ref. 52-23-13, P. Block 401).
(5)Close door and remove access platform.
(6)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R B. Removal
R (1)Disconnect electrical wires (1) from test switch (2).
R (2)Remove ring nut (3) and test switch (2).

R C. Installation
R (1)Install test switch (2) and secure with ring nut (3).
R (2)Connect electrical wires (1) to test switch (2).

R D. Test
R (1)Remove safety clips and tags and close circuit breakers 1WN, 2WN and 3WN.
R (2)Connect electrical ground power unit and energize the aircraft electrical
R network (Ref. 24-41-00, P. Block 301).
R (3)Depress test switch and verify that adjacent warning light illuminate
R and warning horn sounds.

R E. Close-Up
R WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED (REF. 52-10-00,
R P. BLOCK 301).
R (1)Arm door damper and emergency operation cylinder and door warning
R system (Ref. 52-10-00, P. Block 301).
R (2)Make certain that work area is clean and clear of tools and miscellaneous
R items of equipment.
R (3)On all Passenger/Crew Doors and Emergency Exits:
R Spray all components that have been removed/installed or handled
R during the operations covered by this topic with protective film
R (Material No. 05-027).
R (4)Install door lining
R (a)For FWD and AFT Passenger/Crew Doors (Ref. 52-10-13, P. Block 401).
R (b)For Emergency Exit LH and RH (Ref. 52-23-13, P. Block 401).
R (5)Close door and remove access platform.
R (6)De-energize the aircraft electrical network and disconnect electrical
R ground power unit (Ref. 24-41-00, P. Block 301).

RESIDUAL PRESSURE WARNING LIGHT, PASSENGER COMPARTMENT DOORS 73WN, 74WN, 79WN, 80WN REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR PASSENGER/CREW DOORS AND EMERGENCY EXITS (REF. 52-10-00, P. BLOCK 301 AND REF. 52-23-00, P. BLOCK 301).

1. Equipment and Materials

ITEM	DESIGNATION
A.	Circuit Breaker Safety Clips
B.	Blanking Caps
C. Material No. 05-027	Special Materials (Ref. 20-31-00)
Referenced Procedures	
- 52-10-00, P. Block 301	Passenger/Crew Doors - Special Precautions
- 52-10-13, P. Block 401	FWD, AFT Door Lining and Insulation
- 52-23-00, P. Block 301	Emergency Exit - Special Precautions
- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

2. Procedure

(Ref. Fig. 401)

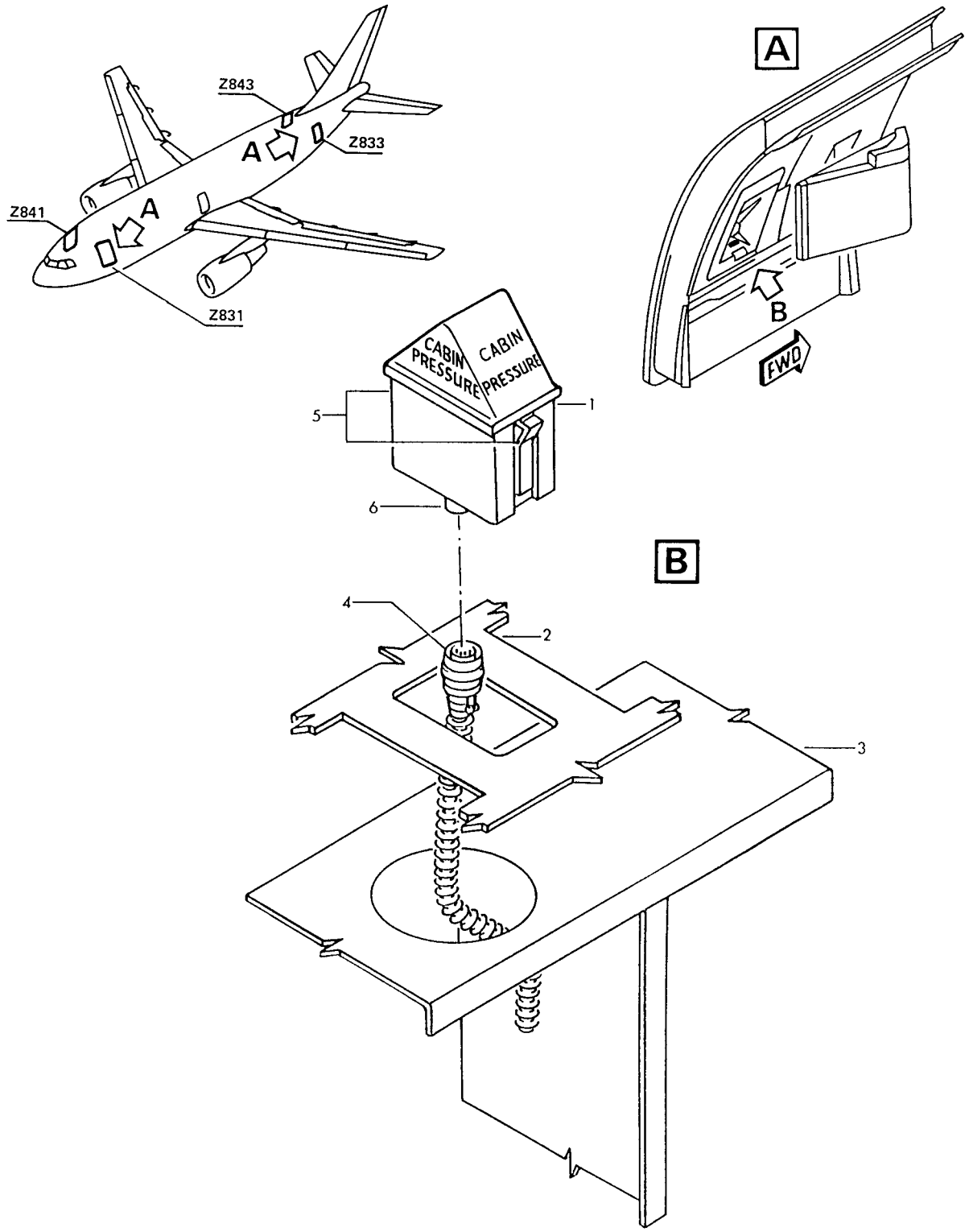
A. Job Set-Up
(1)Open, safety and tag the following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES ARM AND WARN	1WN	205/E22
22VU	SLIDES HORN	2WN	205/E23

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R A. Job Set-Up
R (1)Open, safety and tag the following circuit breakers:



BM6 52 73 15 4 AAP0 00

Residual Pressure Warning Light
Figure 401

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES ARM AND WARN	1WN	205/E22
22VU	SLIDES HORN	2WN	205/E23
131VU	ASPSU SUPPLY	3WN	316/C54

**ON A/C 004-200,

B. Removal
(1)Release door lining (2) (Ref. 52-10-13, P. Block 401) to gain access to electrical connector (4).
(2)Remove electrical connector (4) from receptacle (6) of warning light (1).
(3)Put blanking caps on electrical connector (4) and receptacle (6).
(4)Press attachment springs (5) together to release warning light (1).
(5)Remove warning light (1) from door lining (2).

C. Installation
(1)Remove blanking caps from electrical connector (4) and receptacle (6) of warning light (1).
(2)Press attachment springs (5) together and push warning light (1) into its related opening in door lining (2).
(3)Put door lining (2) in position at passenger/crew door and connect electrical connector (4) to receptacle (6).
(4)Install door lining (2) (Ref. 52-10-13, P. Block 401) to door structure (3).

D. Test
(1)Remove safety clips and tags and close circuit breakers 1WN and 2WN.
(2)Perform functional test of residual pressure warning system (Ref. 52-73-00, P. Block 501).

E. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Spray all components, which have been removed/installed or handled during operation covered by this topic, with protective film (Material No. 05-027).

**ON A/C 105-200,

Post SB 52-2068 For A/C 105-200,

D. Test
(1)Remove safety clips and tags and close circuit breakers 1WN, 2WN and 3WN.
(2)Perform functional test of residual pressure warning system

R (Ref. 52-73-00, P. Block 501).

R E. Close-Up
R (1)Make certain that work area is clean and clear of tools and mis-
R cellaneous items of equipment.
R (2)Spray all components, which have been removed/installed or handled
R during operation covered by this topic, with protective film
R (Material No. 05-027).

RESIDUAL PRESSURE WARNING LIGHT, CARGO COMPARTMENT DOORS 72WN, 82WN - REMOVAL/INSTALLATION

WARNING : SPECIAL PRECAUTIONS MUST BE FOLLOWED BEFORE CARRYING OUT MAINTENANCE ON OR NEAR CARGO COMPARTMENT DOORS (REF. 52-30-00, P. BLOCK 301).

1. Reason for the Job
Removal/Installation of Cargo Compartment Door residual pressure warning light.

2. Equipment and Materials

ITEM	DESIGNATION
A.	Adjustable Access Platform, 2.5 to 5 m (8.20 to 16.40 ft.)
B.	Circuit Breaker Safety Clips and Tags
C.	Blanking Caps
Referenced Procedures	
- 52-30-00, P. Block 301	FWD and AFT Cargo Compartment Doors
- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

3. Procedure

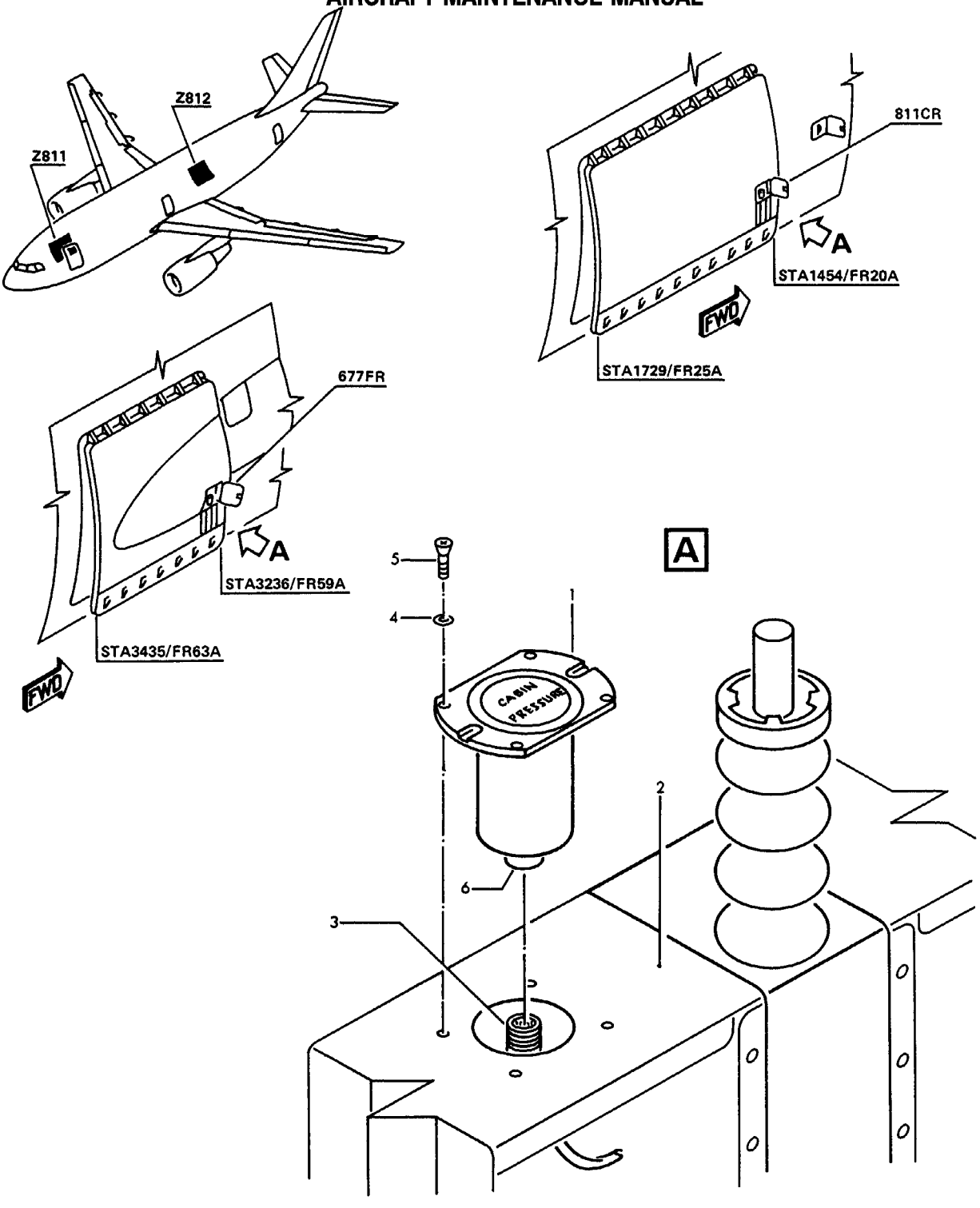
(Ref. Fig. 401)
A. Job Set-Up
(1)Position access platform.
(2)Open, safety and tag following circuit breakers:

PANEL	SERVICE	IDENT.	LOCATION
132VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B05
22VU	SLIDES ARM AND WARN	1WN	205/E22
22VU	SLIDES HORN	2WN	205/E23

R **ON A/C 105-200,

R Post SB 52-2068 For A/C 105-200,

R A. Job Set-Up
R (1)Position access platform.
R (2)Open, safety and tag following circuit breakers:



BM6 52 73 16 4 AAM0 00

Residual Pressure Warning Light
Figure 401

PANEL	SERVICE	IDENT.	LOCATION
132VU	HYDRAULIC/ACCU PRESS CTL & CARGO DOOR PUMP	7GX	333/T51
101VU	ELEC HYD PUMP	23GX	GEN2/B05
22VU	SLIDES ARM AND WARN	1WN	205/E22
22VU	SLIDES HORN	2WN	205/E23
131VU	ASPSU SUPPLY	3WN	316/C54

**ON A/C 004-200,

B. Removal
(1)Open access panel(s) 811BR and/or 677FR to gain access to residual pressure warning light (1).
(2)Remove access panel(s) 811ER and/or 812ER to gain access to electrical connector (3).
(3)Remove electrical connector (3) from receptacle (6) of warning light (1).
(4)Put blanking caps on electrical connector (3) and receptacle (6).
(5)Loosen and remove screws (5) and washers (4) from warning light (1).
(6)Carefully lift warning light (1) out of mounting plate (2).
(7)Remove warning light (1).

C. Installation
(1)Remove blanking caps from electrical connector (3) and receptacle (6).
(2)Put warning light (1) in mounting plate (2) and align holes.
(3)Install screws (5) and washers (4) in warning light (1) and tighten.
(4)Put electrical connector (3) on receptacle (6) of warning light (1).

D. Test
(1)Remove safety clips and tags and close circuit breakers 1WN, 2WN, 7GX and 23GX.
(2)Perform functional test of residual pressure warning system (Ref. 52-73-00, P. Block 501).

**ON A/C 105-200,

Post SB 52-2068 For A/C 105-200,

C. Installation
(1)Remove blanking caps from electrical connector (3) and receptacle (6).
(2)Put warning light (1) in mounting plate (2) and align holes.
(3)Install screws (5) and washers (4) in warning light (1) and tighten.
(4)Put electrical connector (3) on receptacle (6) of warning light (1).

D. Test
(1)Remove safety clips and tags and close circuit breakers 1WN, 2WN, 3WN, 7GX and 23GX.
(2)Perform functional test of residual pressure warning system

R (Ref. 52-73-00, P. Block 501).

R **ON A/C 004-200,

E. Close-Up
(1)Make certain that work area is clean and clear of tools and miscellaneous items of equipment.
(2)Install access panel(s) 811ER and/or 812ER.
(3)Close access panel(s) 811CR and/or 677FR.
(4)Remove access platform.

R **ON A/C ALL

Post SB 52-2039 For A/C 001-003,

CABIN PRESSURE SWITCH (71WN)
REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.6 m (8.63 ft.)
B.	Blanking Caps
C.	Circuit Breaker Safety Clips
D.	O-ring
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open the FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)Open the access door 131AZ.
(6)Open, safety and tag the circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

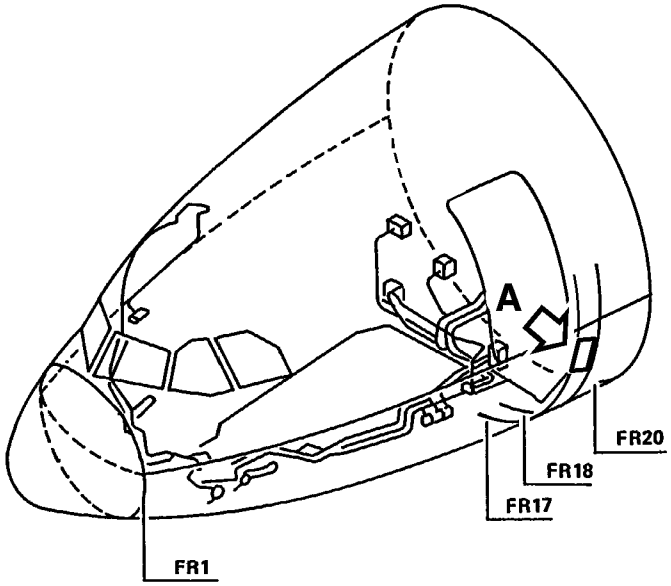
B. Removal

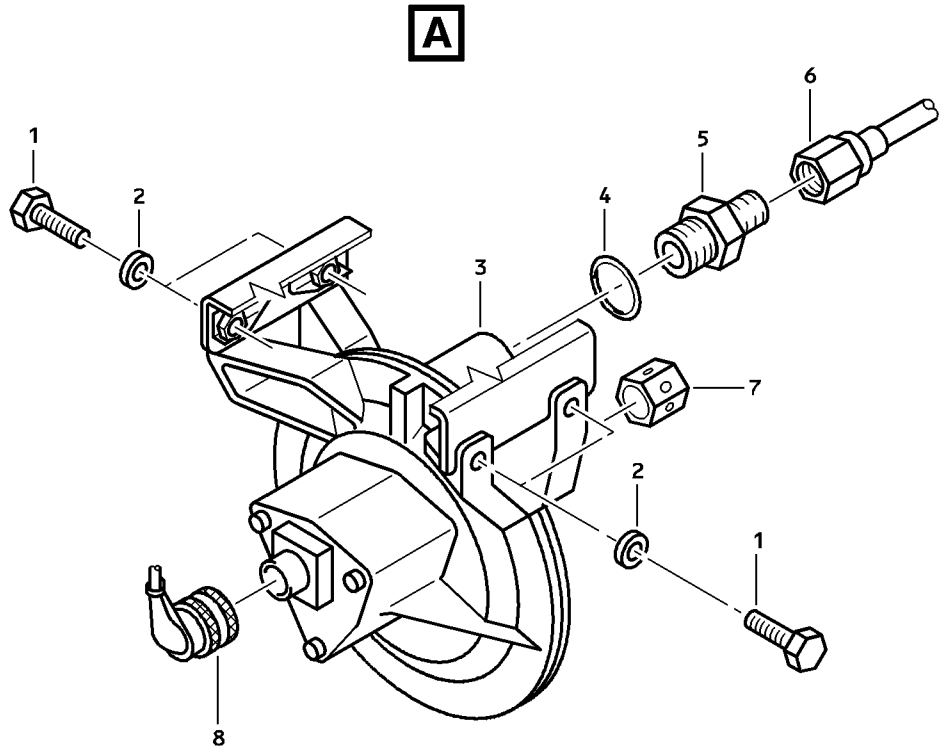
**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 401)

**ON A/C ALL





BM5 52 73 17 4 AAM0 00

Cabin Pressure Switch (71WN)
Figure 401

(1)Disconnect the electrical connector (8).
(2)Put blanking caps on the disconnected electrical connectors.
(3)Disconnect the pipe (6).
(4)Remove the screws (1) and the washers (2).
(5)Remove the pressure switch (3).
(6)Remove and retain the calibrated plug (7).
(7)Remove and retain the restrictor (5).
(8)Remove and discard the seal (4).
(9)Put blanking plugs on the disconnected line ends.

C. Preparation of Replacement Component
(1)Make sure that the parts retained from the removed component are clean and in the correct condition.
(2)Remove the blanking plug and the protective caps from the pressure switch (3).
(3)Install a new O-ring on the restrictor (5).
(4)Install the restrictor (5) on the pressure switch (3) and tighten.
(5)Install the calibrated plug (7) on the pressure switch (3) and tighten.

D. Installation
(1)Put the pressure switch (3) in position on its support.
(2)Install the screws (1) and the washers (2) and tighten.
(3)Remove the blanking plugs from the disconnected line ends.
(4)Install the pipe (6) and tighten.
(5)Remove the blanking cap from the electrical connector (8).
(6)Make sure that the electrical connectors are clean and in the correct condition.
(7)Connect the electrical connector (8).

E. Close-Up
(1)Remove safety clips and tags and close the following circuit breakers : 1WN, 2WN.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Close the access door 131AZ.
(4)Close FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(6)Remove the access platform.

F. Test
(1)Perform a test of the residual pressure warning system (Ref. 52-73-00, P. Block 501).

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

POWER SUPPLY UNIT-AUTONOMOUS STANDBY (70WN) REMOVAL/INSTALLATION

1. Equipment and Materials

ITEM	DESIGNATION
A.	Access Platform, 2.6 m (8.63 ft.)
B.	Blanking Caps
C.	Circuit Breaker Safety Clips
Referenced Procedures	
- 24-41-00, P. Block 301	AC External Power Control
- 52-30-00, P. Block 1	Cargo Compartment Doors
- 52-73-00, P. Block 501	Emergency Escape Slide Release and Residual Pressure Warning

2. Procedure

A. Job Set-Up
(1)Position access platform.
(2)Connect electrical ground power unit and energize the aircraft electrical network (Ref. 24-41-00, P. Block 301).
(3)Make certain that electronics racks ventilation is correct.
(4)Open the FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)Open the access door 131AZ.
(6)Open, safety and tag the circuit breakers :

PANEL	SERVICE	IDENT.	LOCATION
22VU	SLIDES/ARM & WARN	1WN	205/E23
22VU	SLIDES/HORN	2WN	205/E22

B. Removal of the Autonomous Standby Power Supply Unit (70WN)

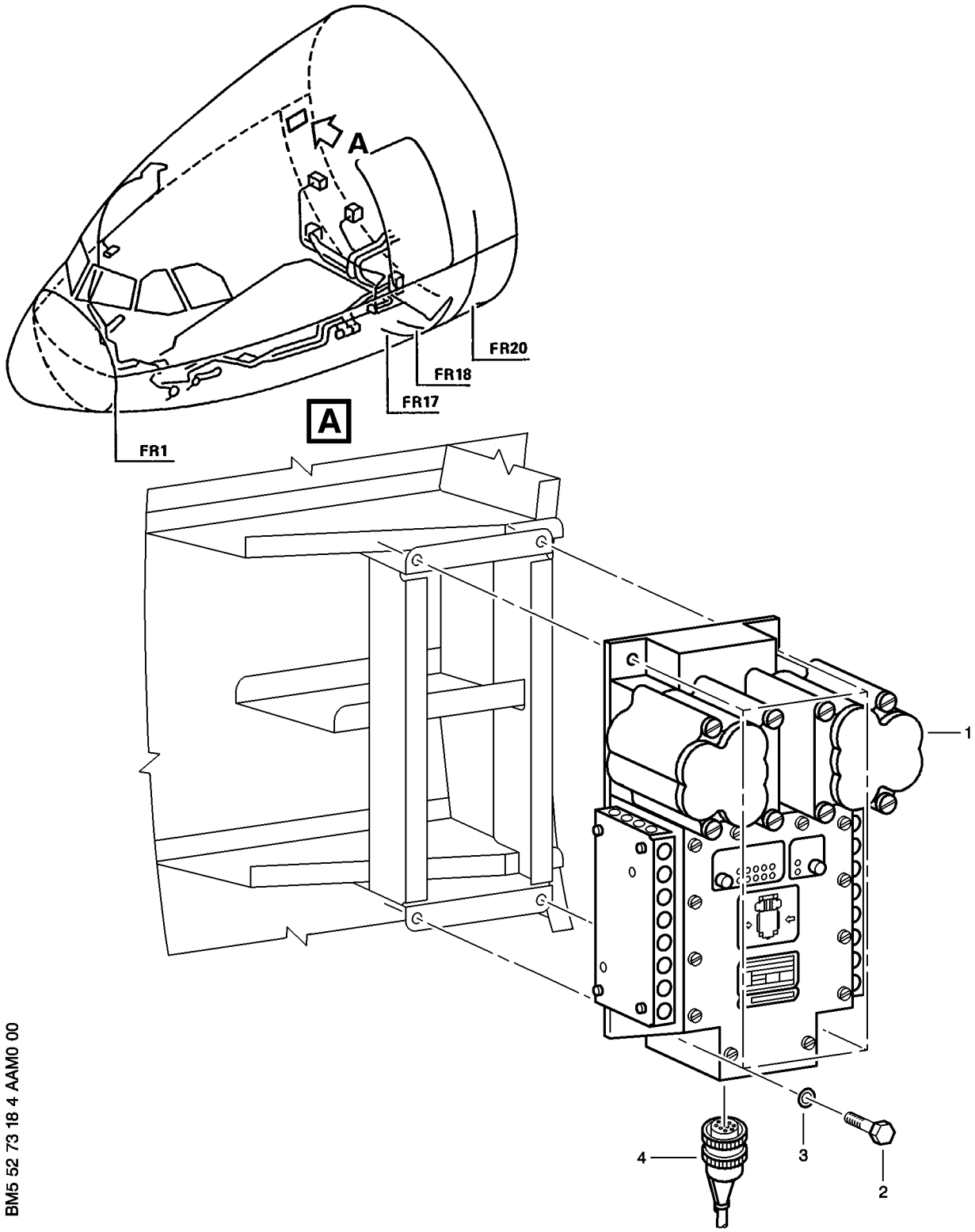
**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 401)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,



Autonomous Standby Power Supply Unit (ASPSU)
Figure 401

(1)Disconnect the electrical connector (4) from the ASPSU (1).
(2)Put blanking caps on the disconnected electrical connectors.
(3)Remove the bolts (2), the washers (3) and the ASPSU (1).

C. Installation of the Autonomous Standby Power Supply Unit (70WN)
(1)Clean the component interface and/or the adjacent area.
(2)Put the ASPSU (1) in position.
(3)Install the washers (3) and the bolts (2).
(4)Remove the blanking caps from the electrical connectors.
(5)Make sure that the electrical connectors are clean and in correct condition.
(6)Connect the electrical connector (4) to the ASPSU (1).

D. Removal of the Batteries

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(Ref. Fig. 402)

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

(1)Disconnect the electrical connector (10) from the ASPSU (11).
(2)Remove the screws (12) and the washers (13) and (14).
(3)Remove the batteries (15).

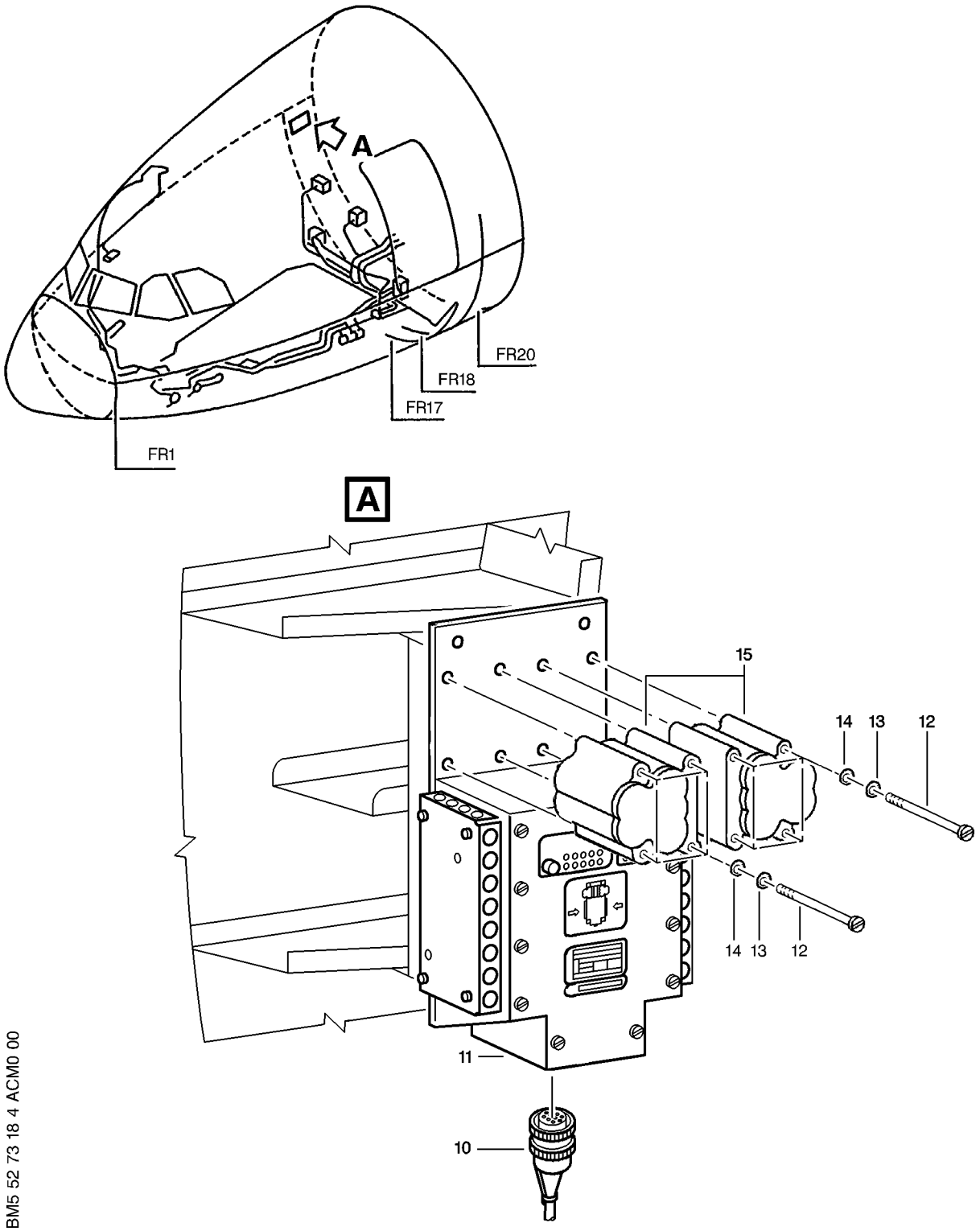
E. Installation of the Batteries
NOTE : Prior to installation, make sure that the batteries are fully charged.
(1)Make sure that the batteries (15) are fully charged.
(2)Put the batteries (15) in position.
(3)Install the washers (13) and (14) and the screws (12) and tighten them.
(4)Connect the electrical connector (10) to the ASPSU (11).

**ON A/C ALL

Post SB 52-2039 For A/C 001-003,

F. Test
(1)Perform a test of the autonomous standby power supply unit (ASPSU) (Ref. 52-73-00, P. Block 501).

G. Close-Up
(1)Remove the safety clips and tags and close the following circuit



Batteries - ASPSU
Figure 402

breakers : 1WN, 2WN.
(2)Make certain that working area is clean and clear of tools and miscellaneous items of equipment.
(3)Close the access door 131AZ.
(4)Close the FWD cargo compartment door (Ref. 52-30-00, P. Block 1).
(5)De-energize the aircraft electrical network and disconnect electrical ground power unit (Ref. 24-41-00, P. Block 301).
(6)Remove the access platform.

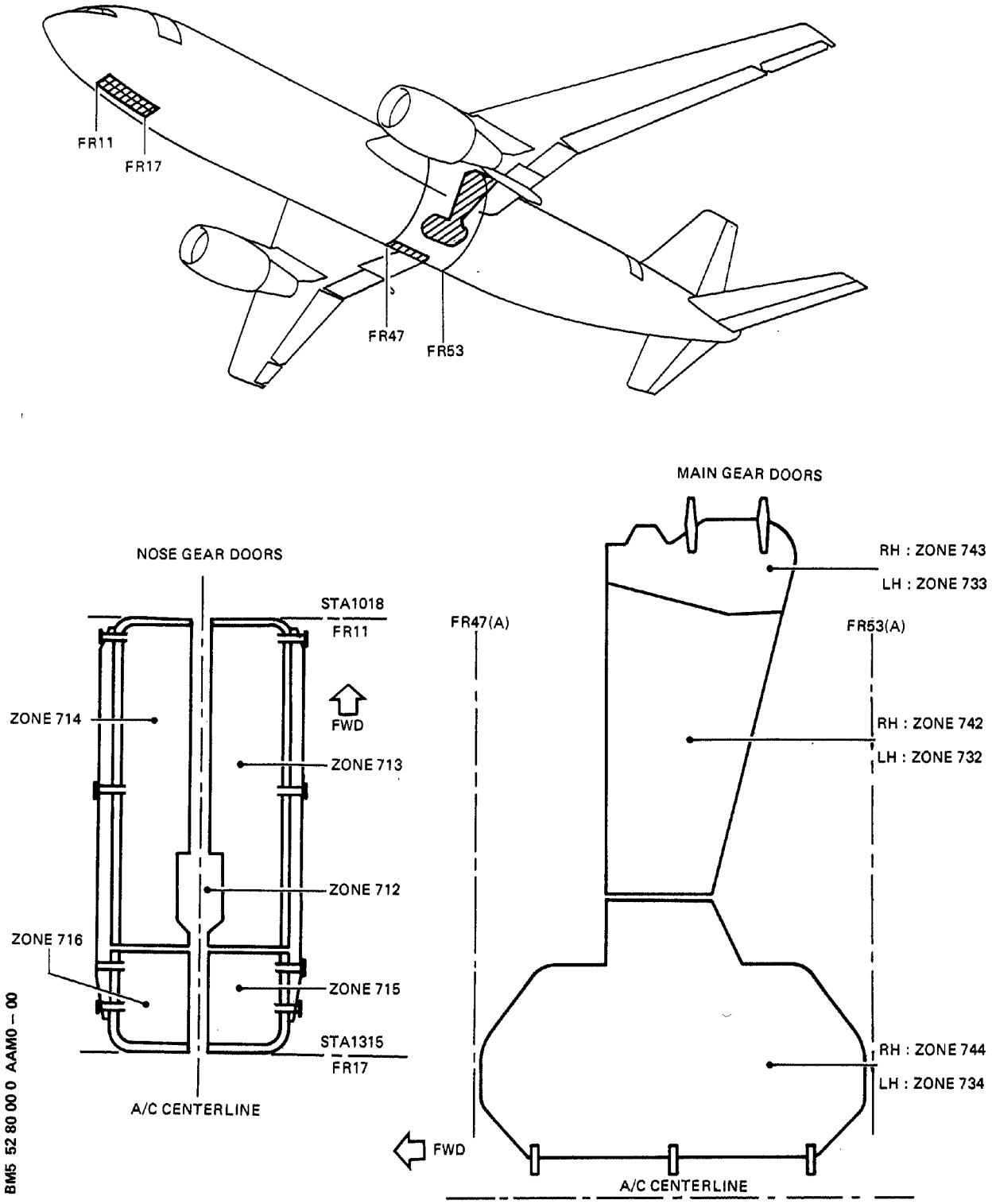
LANDING GEAR DOORS - DESCRIPTION AND OPERATION

1. General (Ref. Fig. 001)
   Landing gear doors allow gear extension and retraction and maintain fuselage and wing contour when the gear is retracted.
   The nose gear doors are located at the forward lower part of the fuselage (Ref. 32-22-00)
   The main gear doors are located partly in the fuselage, partly in the wings. (Ref. 32-12-00)

2. Description and Operation

   A. Nose Gear Doors
      The four landing gear doors (Zones 713, 714, 715 and 716) and the panel (Zone 712) under the landing gear leg are hinged to the landing gear well edge.

   B. Main Gear Doors
      The main landing gear doors are made of light alloy and composite material panels.
      There are 6 main gear doors located in zones 732, 733 and 734 for the LH landing gear and in zones 742, 743 and 744 for the RH landing gear.
      They close the landing gear well when the gear is retracted.
      They consist of :
      (1)Two main gear doors (zones 734 and 744) hinged parallel to the A/C centerline. They are operated hydraulically.
      (2)Two cylinder doors (zones 732 and 742) ; each of them is secured to a landing gear leg.
      (3)Two secondary doors (zones 733 and 743) hinged to the wing structure.



Landing Gear Doors
Figure 001

MAIN GEAR DOORS - DESCRIPTION AND OPERATION

1. General

The main gear doors (Ref. 32-12-00) located in the fuselage and wings close off the main landing gear wells. Fuselage and wing contour is restored by the doors in closed position.
The fuselage main doors are hydraulically operated. The cylinder doors are mechanically linked to the main gear leg. The secondary doors are hinged to the wing lower surface structure.

2. Description and Operation

(Ref. Fig. 001)

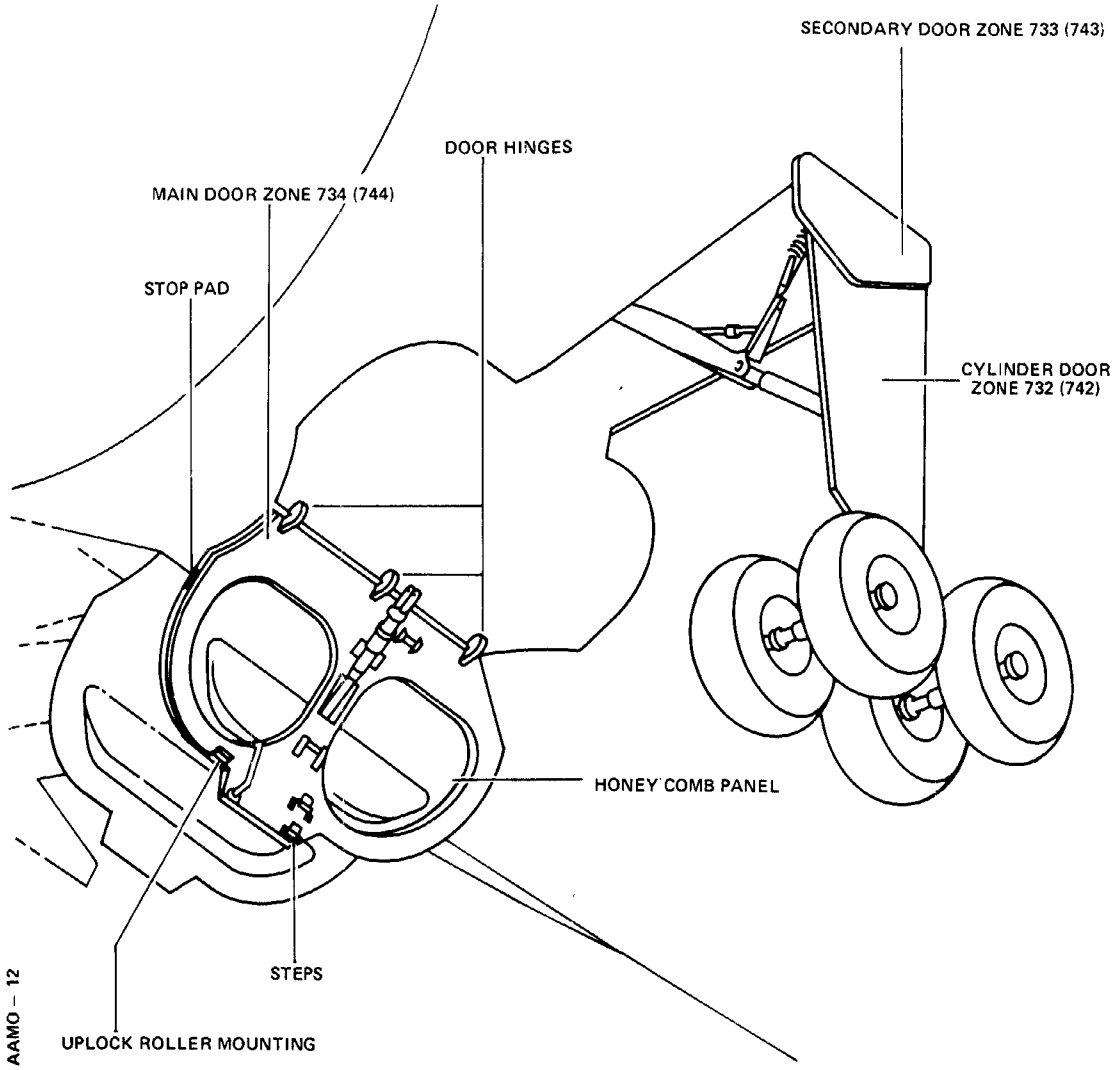
A. Main Gear Main Doors

Located between STA2612/FR47/48 and STA2878/FR53, the main doors (LH : Zone 734, RH : Zone 744), restore fuselage contour when the aircraft is in flight or on the ground.
Each door consists of an inner and outer skin separated by ribs, reinforced by doublers and bounded by edge members.
The door is recessed forward and aft to accommodate the gear wheels when the gear is retracted. Each recess is blanked off by a honeycomb panel.
The door is attached to the fuselage structure by three hinges.
The center hinge incorporates a lug for attachment of the landing gear sequence valve control rod.
The door is fitted with a roller which engages in an uplock assembly, secured to the aircraft structure, when the door is closed.
A fork fitting is provided on the door center rib for attachment of the door actuating cylinder.
Two teflon stops, one forward and one aft, are mounted on the door edge.
The main door also includes steps and hand grips to gain access to zones 147/148 for maintenance purposes.

B. Cylinder and Secondary Doors

Each door consists in Kevlar stabilized Nomex core with carbon fiber skin.
The cylinder door (LH : Zone 732, RH : Zone 742) includes :
- at the forward end : two fittings connected to two adjustable rods. These rods secure the door to the drag strut.
- at the aft end : two adjustable fittings which attach the door to the shock strut.

The secondary door (LH zone 733, RH zone 743) includes :
- two adjustable arms connected to the wing structure.
- a fork fitting connected to the rod linking the door to the gear hinge arm.



Main Gear Doors
Figure 001

1. Paint touch-up on landing gear door steps

A. Equipment and Materials

ITEM	DESIGNATION
A. Material No. 07-007	Lacquers (Ref. 20-31-00)
B. Material No. 11-004	Cleaning Agents (Ref. 20-31-00)
Referenced Procedure	
- 32-12-11, P. Block 301	Main Gear Main Door (Ground Door(s) Opening)

B. Job Set-Up
(1)Open main landing gear doors (Ref. 32-12-11, P. Block 301).
WARNING : APPLY MATERIALS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. SOME MATERIALS ARE FLAMMABLE AND/OR TOXIC. AVOID INHALING FUMES - USE IN WELL VENTILATED AREA - OBSERVE FIRE REGULATIONS.

C. Painting
(1)Clean step to be painted with Material No. 11-004.
(2)Lightly rub down area to be painted using Scotch Brite pad.
(3)Apply 07-007 paint with brush.
The paint drying time is 24 hours.

D. Close-Up
(1)Close landing gear doors (Ref. 32-12-11, P. Block 301).

NOSE GEAR DOORS - DESCRIPTION AND OPERATION

1. General

The four nose gear doors (Ref. 32-22-00) located in the fuselage front lower part between STA1019/FR11 and STA1315/FR17 close off the nose gear well. They allow nose gear extension and retraction and restore the fuselage contour when closed.

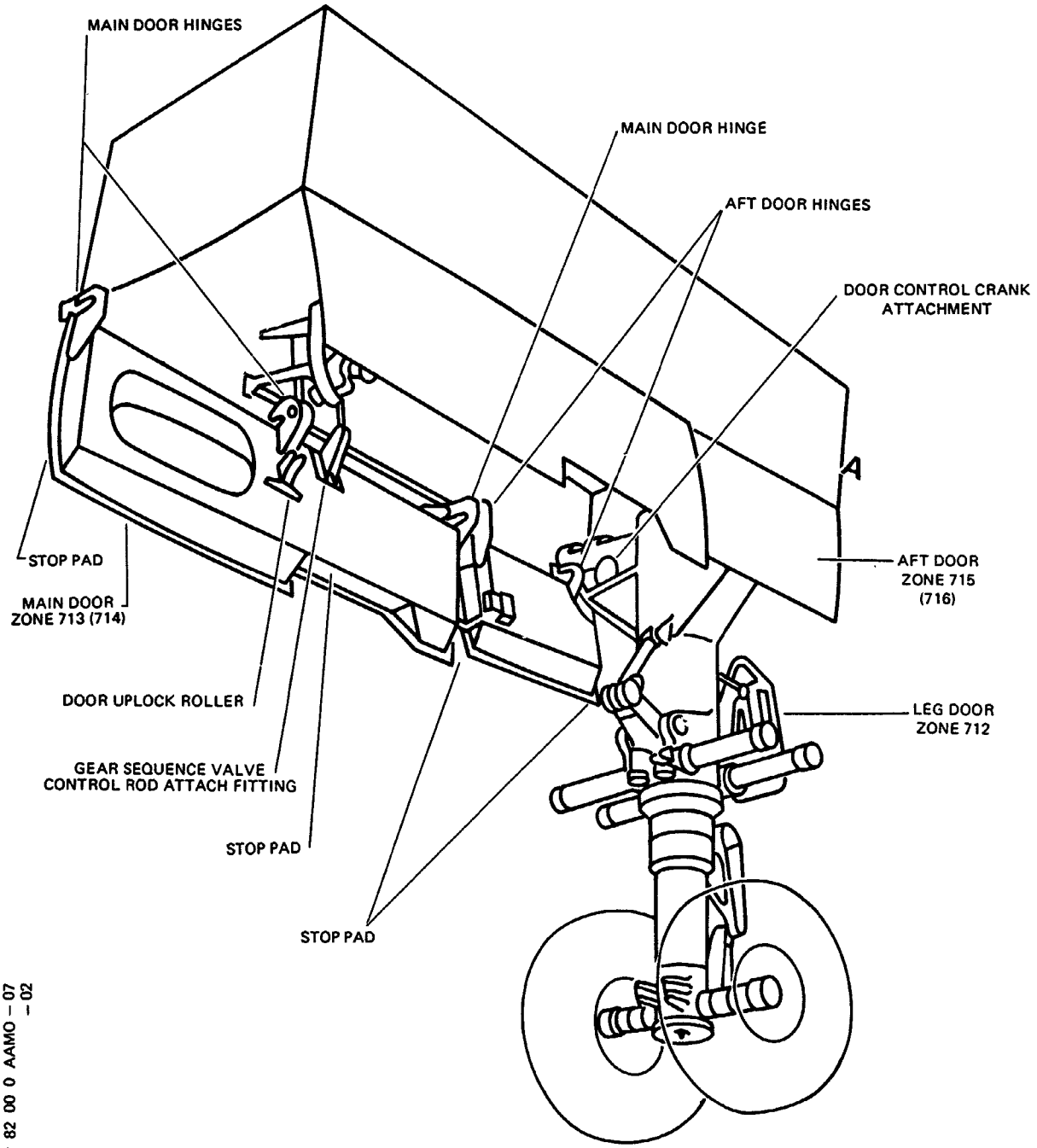
2. Description and Operation (Ref. Fig. 001)

A. Main Doors

Each door (LH : Zone 713, RH : Zone 714) is made of a light alloy outer skin on which edgings, longitudinal and transversal stiffeners forming a primary structure are riveted.
A light alloy inner skin completes the box structure and contributes to its stiffness. The inner skin is recessed at the front of each door to accommodate the wheels in gear retracted position.
At the rear of the doors, a cutout in the center edging allows nose gear strut movements during gear extension.
Each door is hinged to the landing gear well edging via three ball joints.
The actuating cylinder lower attachment and the uplock roller are located on the center fitting.
An attach fitting connecting with the landing gear sequence valve control rod, is located to the rear of the center fitting.
On the forward and aft edgings teflon stops limit door displacement in closed position.

B. Aft Doors

Each door (LH : Zone 715, RH : Zone 716) is made of a light alloy outer skin on which are riveted edgings, longitudinal and transversal stiffeners forming a primary structure.
A light alloy inner skin completes the box structure and contributes to its stiffness.
Each door is hinged to the fuselage edging via two ball joints. In the rear angle of each door, a fitting serves for connecting the control crank to the shock strut.
The cut out enabling passage of the telescopic strut when the gear is extended is blanked off by a panel (zone 712) secured to the shock strut by adjustable rods when the gear is retracted.



BM5 52 82 00 0 AAMO – 07 – 02
DM5

Nose Gear Doors
Figure 001